

COUNTY OF LOUDOUN
FIRE AND RESCUE SYSTEM



BLOODBORNE PATHOGENS & TUBERCULOSIS
EXPOSURE CONTROL PLAN

30 November 2004

LOUDOUN COUNTY FIRE AND RESCUE SYSTEM

EXPOSURE CONTROL PLAN BLOODBORNE & AIRBORNE PATHOGENS

TABLE OF CONTENTS

Glossary

Section I.....Introduction

Section II.....ExposureDetermination/Risk Assessment

Section III.....Methods of Compliance

Section IV.....Compliance Monitoring

Section V.....Vaccination & Testing Policies

**Section VI.....Exposure Incident-Procedures for Notification, Evaluation,
and Post Exposure Medical Management**

Section VII.....Member Education & Training

Section VIII.....Record Keeping

**SCHEDULE FOR IMPLEMENTATION
LOUDOUN COUNTY FIRE AND RESCUE SYSTEM**

EXPOSURE CONTROL PLAN Bloodborne /Airborne	August 1992 Policy - 1988
EDUCATION & TRAINING Bloodborne/Airborne	August 1992 Policy - 1988
HEPATITIS B VACCINE	February 1988
ENGINEERING CONTROLS/SOPS	August 1992 Policy 1988
COMPLIANCE MONITORING	August 1992
RECORD KEEPING	August 1992
TUBERCULIN SKIN TESTING	August 1992
RESPIRATORY PROTECTION PROGRAM	N/A

GLOSSARY OF TERMS AS DEFINED BY OSHA

For purposes of this plan, the following definitions shall apply:

Airborne Pathogens means pathogens which can cause disease upon entering the respiratory system. The mode of transmission is by air, not direct or indirect contact.

Antibodies means protein complexes produced by the immune system in response to antigens. An antibody marks an antigen for removal by other components of the immune system.

Antibiotics means medications effective in inhibiting the growth of or killing bacteria. They have no impact on viruses.

Antigens means proteins on the surface of the invading organism capable of causing a response from the immune system.

Bacteria means small organisms present throughout the environment, capable of life independent of other organisms.

Body Substance Isolation means a concept practiced by emergency response personnel (members) - blood and all body fluids are to be considered to pose a risk for transmission of bloodborne diseases.

Blood means human blood, human blood components, and products made from human blood.

Bloodborne Pathogens means pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV), hepatitis C virus, human immunodeficiency virus (HIV), and Syphilis.

Clinical Laboratory means a workplace where diagnostic or other screening procedures are performed on blood or other potentially infectious materials.

Contaminated means the presence or the reasonably anticipated presence of blood or other potentially infectious materials on an item or surface.

Contaminated Laundry means laundry, which has been soiled with blood or other potentially infectious materials or may contain sharps.

Contaminated Sharps means any contaminated object that can penetrate the skin including, but not limited to, needles, scalpels, broken glass, broken capillary tubes, and exposed ends of dental wires.

Communicable Diseases means a disease, which can be readily spread, from one person to another. A disease can be infectious by not communicable. Communicable diseases are spread two ways--direct contact and indirect contact.

Decontamination means the use of physical or chemical means to remove, inactivate, or destroy bloodborne pathogens on a surface or item to the point where they are no longer capable of transmitting infectious particles and the surface or item is rendered safe for handling, use, or disposal.

Direct Contact means spread by direct contact with infected blood, body fluids or airborne particles from one person to another.

Disease means any deviation of the body from its normal state.

Dose of the Organism means the number of the organisms that are present in the exposure. A specific number is required to be present in order for infection to occur. Each disease will have a different number requirement. If that number is not present, infection will not occur.

Engineered Sharps Injury Protection (ESIP) means a physical attribute built into either a device or into a non-needle sharp that effectively reduces the risk of an exposure incident when withdrawing body fluids, accessing a vein or artery, or administering medication or other fluids.

Engineering Controls means controls (e.g., sharps disposal containers, self-sheathing needles, safer medical devices, such as sharps with engineered sharps injury protections and needless systems) that isolate or remove the bloodborne pathogens hazard from the workplace.

Exposure means contact with blood or other potentially infectious materials to the eye, mouth, other mucous membrane, non-intact skin, or parenteral contact.

Exposure Incident means a specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials has occurred through the performance of a member's duties. (actual vs. anticipated)

Fungi means class of organisms containing yeast and molds.

Hand Washing Facilities means a facility providing an adequate supply of running potable water, soap and single use towels or hot air drying machines.

HBV means hepatitis B virus.

HIV means human immunodeficiency virus.

Host Resistance means the ability of the individual to fight off infection. The healthier you are, the less chance of infection.

Incubation Period means the period of time from the exposure to the disease until the time of the first appearance of disease symptoms. Example--HIV incubation period is two to ten years.

Indirect Contact means spread from one person to an object and to another person.

Infection means the growth of an organism in a host (person) and there may or may not be any signs or symptoms of the illness.

Infectious Diseases means illness resulting from the invasion of the body by a bacteria, virus, fungi, or parasite. The term infectious only means--caused by a pathogen.

Mode of Entry or Transmission means each disease has a specific way in which it must enter the body to cause disease. (the method in which you were exposed--blood to non-intact skin, needlestick, etc.)

Needless Systems means a device that does not use needles for:

- (1) the collection of bodily fluids or withdrawal of body fluids after initial venous or arterial access is established;
- (2) the administration of medication or fluids; or
- (3) any other procedure involving the potential for occupational exposure to bloodborne pathogens due to percutaneous injuries from contaminated sharps.

Non-Intact Skin means skin, which is chapped, abraded, or afflicted with dermatitis or any open wound.

Occupational Exposure means reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the performance of an member's duties.

O.P.I.M.- Other Potentially Infectious Materials means:

- (1) The following human body fluids: semen, vaginal secretions, fluid in the spinal column (cerebrospinal fluid), fluid in the joints (synovial fluid), fluid in the chest cavity (pleural fluid), fluid around the heart (pericardial fluid), fluid in the abdomen (peritoneal fluid), amniotic fluid, saliva in dental procedures, any body fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids;
- (2) Any unfixed tissue or organ (other than intact skin) from a human (living or dead); and
- (3) HIV-containing cell or tissue cultures, organ cultures, and HIV - or HBV/HCV - containing culture medium or other solutions; and blood, organs, or other tissues from experimental animals infected with HIV or HBV/HCV.

Parenteral means piercing mucous membranes or the skin barrier through such events as needlesticks, human bites, cuts, scrapes and abrasions.

Personal Protective Equipment (PPE)" is specialized clothing or equipment worn by members for protection against a hazard. General work clothes (e.g., uniforms, pants, shirts or blouses) not intended to function as protection against a hazard are not considered to be personal protective equipment.

Regulated Waste means liquid or semi-liquid blood or other potentially infectious materials; contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed; items that are caked with dried blood or other potentially infectious materials are capable of releasing these materials during handling; contaminated sharps; and pathological and microbiological wastes containing blood or other potentially infectious materials.

Sharp means any object that can reasonably be anticipated to penetrate the skin or other parts of the body such as needle devices, scalpels, lancets, etc. Other items that are not sharp, but could become sharp if broken, are included such as glass objects and capillary tubes.

Source Individual means any individual, living or dead, whose blood or other potentially infectious materials may be a source of occupational exposure to the member. Examples include, but are not limited to, hospital and clinic patients; clients in institutions for the developmentally disabled; trauma victims; clients of drug and alcohol treatment facilities; residents of hospices and nursing homes; human remains; and individuals who donate or sell blood or blood components.

Sterilize means the use of a physical or chemical procedure to destroy all microbial life including highly resistant bacterial endospores.

Suspect Case of Tuberculosis means one in which the individual is identified with signs and symptoms of Tuberculosis.

Toxins means poisonous chemicals secreted by bacteria or released following destruction of the bacteria.

Universal Precautions is an approach or concept to infection control. According to the concept of Universal Precautions, all human blood and certain human body fluids are to be considered to pose a risk for transmission of bloodborne disease, and are treated as if known to be infectious for HIV, HBV, and other bloodborne pathogens.

Virus means microscopic organisms that cause various common human diseases; Viruses are capable of multiplying only in connection with living cells (not capable of growth or reproduction apart from living cell).

Virulence means the strength of the organism outside the human body. Organisms such as HIV and TB die quickly when exposed to light and air. The hepatitis B virus, however, can survive approximately seven days on a surface.

Window Phase of Testing means the time between contracting a disease until the time a laboratory test will pick up the presence of a disease. Example--HIV window phase of testing is about one to twelve weeks - the source individual may test negative at the time of your exposure to him, but he may actually have the disease. That is why the health department conducts several blood tests on the exposed worker (baseline and additional tests).

Work Practice Controls means controls that reduce the likelihood of exposure by altering the manner in which a task is performed (e.g., prohibiting recapping of needles by a two-handed technique).

**COUNTY OF LOUDOUN
FIRE AND RESCUE SYSTEM**

**EXPOSURE CONTROL PLAN
BLOODBORNE & AIRBORNE PATHOGENS**

SECTION I. INTRODUCTION

The **OSHA/VOSH 1910.1030 Bloodborne Pathogens Standard** was issued to reduce the occupational transmission of infections caused by microorganisms sometimes found in human blood and certain other potentially infectious materials.

A variety of harmful microorganisms, including Hepatitis B Virus (HBV), Hepatitis C Virus (HCV), and Human Immunodeficiency Virus (HIV), may be transmitted through contact with infected human blood. Exposures to human blood and certain other body fluids containing these viruses may occur through routes like needlestick injuries and by direct contact of mucous membranes and non-intact skin with contaminated blood/materials.

Occupational transmission of HBV & HCV occurs much more often than transmission of HIV. Although HIV is rarely transmitted following occupational exposure incidents, the lethal nature of HIV requires that all possible measures be used to prevent exposure of workers.

The Center of Disease Control & Prevention (CDC) established the Guidelines for Prevention and Control Tuberculosis.

As a means of complying with the VOSH Bloodborne Pathogens Standard and the Centers for Disease Control and Prevention Guidelines for Prevention and Control Tuberculosis, Loudoun County Department of Fire & Rescue Services has established the **Bloodborne & Airborne Pathogens Exposure Control Plan**. This plan is designed to minimize and to prevent, when possible, the exposure of members of the Loudoun County Fire-Rescue System to disease-causing microorganisms transmitted through human blood or airborne transmission.

Basic components of this exposure control plan include:

- **Exposure Determination/Risk Assessment**
- **Methods of Compliance**
- **Compliance Monitoring**
- **Vaccination & Testing Policies**
- **Exposure Incident - Procedures for Notification, Evaluation, and Post Exposure Medical Management**
- **Member Education & Training**
- **Record Keeping**

This plan will be reviewed, and updated if necessary, six months after implementation, and at least annually thereafter or whenever necessary to reflect new or modified tasks and procedures which affect occupational exposure and to reflect new or revised member positions with occupational exposure. The review and update of such plans shall also reflect changes in technology that

eliminate or reduce exposure to bloodborne and airborne pathogens and will document the review, consideration and implementation of appropriate, commercially available, effective and safer medical devices designed to eliminate or minimize occupational exposure. Non-managerial members responsible for direct patient care and training will be solicited for input.

Reviews and updates of the Bloodborne & Airborne Pathogens Exposure Control Plan will be conducted by:

- The Fire-Rescue Exposure Control Committee of the Loudoun County Department of Fire-Rescue Services currently chaired by the Primary Designated Infection Control Officer and consists of the Department's Secondary Designated Infection Control Officers.

Copies of this plan are available for review by the member at the following locations:

- Loudoun County Department of Fire & Rescue Services & each worksite that has members included in this plan.

Members may obtain his/her own copy of this plan within 15 days of his/her request to the Department's Primary "Designated Infection Control Officer".

New members with potential occupational exposure will be trained regarding bloodborne and airborne pathogens infection control at the time of initial assignment to tasks where exposure may occur (prior to assignment to risk duties). Refer to Section VII. Member Education & Training Section for further information and requirements.

SECTION II. EXPOSURE DETERMINATION/RISK ASSESSMENT

All Job Classifications for which it is reasonable to anticipate that members will have skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials (refer to Table 1), and to airborne transmissible disease (refer to Table 2 & 3), as a part of their job duties will be included in this exposure control plan. Exposure determination/Risk Assessment is made without regard to the use of personal protective equipment.

Table #1

OTHER POTENTIALLY INFECTIOUS MATERIALS (OPIM)

Body Fluids

semen

vaginal secretions

cerebrospinal fluid

pleural fluid

pericardial fluid

peritoneal fluid

amniotic fluid

synovial fluid

any body substance visibly contaminated with blood, (includes urine, feces, saliva, sweat, and tears, if visibly contaminated with blood.)

all body fluids in situations where it is difficult or impossible to differentiate between body fluids

Other Materials

any unfixed tissue or organ (other than intact skin) from a human (living or dead)

HIV/HBV/HCV containing cell or tissue cultures, organ cultures, and culture medium

Blood, organs, or other tissues from experimental animals infected with HIV or HBV/HCV

Table #2

SIGNS & SYMPTOMS OF TUBERCULOSIS (TB)

Persistent cough ≥ 3 wks.	Productive cough	Bloody sputum
Loss of appetite	Night sweats	Weight loss
Fever	Weakness	

Table #3

TUBERCULOSIS - HIGH RISK PROCEDURES

Aerosolized medication	Bronchoscopy
Endotracheal intubation	Suctioning procedures
Sputum induction	Autopsies
	Transport in a closed vehicle

Table #4

Tuberculosis - High Risk Groups

- HIV positive persons
 - Close contacts of infected persons
 - Persons with more susceptible medical risk factors
 - Foreign born persons from high prevalence countries
 - Sheltered or homeless persons
 - Alcoholics and IV drug users
 - Inmates
 - Nursing home residents
-

Table #5

Tuberculosis - High Risk Workplace Settings

- Health care settings
 - Medical
 - Dental (where high risk procedures are performed)
 - Emergency Medical Services
 - Hospice
 - Correctional facilities
 - Shelters
 - Long term care facilities
 - Drug treatment centers
-

This plan categorizes Job Classifications into the following Exposure Determination Categories:

- Category A **Routine contact** with blood or other potentially infectious materials and to airborne transmissible disease.
- Category B **Probable contact** with blood or other potentially infectious materials and to airborne transmissible disease.

All members of the Loudoun County Fire and Rescue Services are included in this plan and have members in Exposure Determination/Risk Assessment Category A or B.

All Management and Supervisory members are responsible to:

- **support and enforce compliance with this plan**
- **ensure initial medical evaluations, immunizations and infection control education/training have been completed prior to allowing any individual to begin emergency response**
- **mandate safe operating practices on scene and at worksites**
- **correct any actions not in compliance with the plan and require remedial training if necessary**
- **refer any individual for medical evaluation who may possibly be unfit for work for infection control or other reasons**
- **suggest improvements to the plan**
- **suggest safer work practices, engineering controls, administrative controls, and PPE**
- **obtain annual medical examination (career personnel only), Tuberculosis skin testing, and exposure control education and training at no cost to the member.**

All members are responsible to:

- **assume ultimate responsibility for their own health and safety**
- **participate in education and training programs prior to active service and attend on-going education and training programs**
- **perform work duties in compliance with this plan to include always using PPE as the situation dictates**
- **wash their hands with soap and water immediately after removing gloves, when soap and water is not available, the alcohol based waterless antiseptic hand rinse is to be utilized**
- **suggest improvements to the plan**
- **suggest safer work practices, engineering controls, administrative controls, and PPE**
- **obtain annual medical examination (career personnel only), Tuberculosis skin testing, and exposure control education and training at no cost to the member.**

CATEGORY LIST A ROUTINE EXPOSURE MEMBERS

All members in job classifications listed here are included in the plan.

- **Chief of Fire-Rescue Services (Duty Officer)**
- **Assistant Chief of Fire-Rescue Services (Duty Officer)**
- **Deputy Chief of Field Services (Duty Officer)**
- **Chief of the Fire Marshal's Division ** (Duty Officer)**
- **Deputy Chief of Volunteer Support & EMS (Duty Officer)**
- **Deputy Chief of Planning & Training (Duty Officer)**
- **Deputy Chief of Communications (Duty Officer)**
- **Battalion Chiefs**
- **Captain/Fire-Rescue Field Operations**
- **Safety Officers**
- **Technician/Fire-Rescue Field Operations**
- **Fire Fighter/EMT**
- **Substitute and part-time members performing the duties of the job classifications listed above.**
- **Operational Fire-Rescue Volunteer members**

CATEGORY LIST B PROBABLE EXPOSURE MEMBERS

Job classifications in which some members may have occupational exposure are included on this list and in the plan. Since not all the members in these categories are expected to incur exposure to blood or other potentially infectious materials, the tasks or procedures that would cause these members to have occupational exposure are also listed. The job classifications and associated tasks for these categories are as follows:

Tasks/Procedures: "may respond to public safety emergencies as required" is associated with all job classifications listed below.

* Performs training activities involving blood/OPIM.

** Performs law enforcement activities.

Job Classifications:

- **Assistant to the Chief**
- **Volunteer Coordinator/Designated Infection Control Officer**
- **Emergency Services Officer**
- **Training Captain ***
- **Training Officer ***
- **Assistant Fire Marshal ****
- **Investigator ****
- **Inspector ****
- **Public Education Manager**

- **Public Education Specialists**
- **Communications Supervisor**
- **Communications Shift Supervisors**
- **Fire-Rescue Dispatchers**
- **Substitute and part-time members performing the duties of the job classifications listed above.**
- **Administrative/Associate Fire-Rescue Volunteer Members**

The Designated Infection Control Officer (D.O.) for the Loudoun County Fire & Rescue System:

- **Frankie H. Rust, Volunteer Coordinator/Designated Infection Control Officer**
- **Secondary Designated Infection Control Officers are Linda Hale, Jose' Salazar, and Daniel Smith.**

Medical Surveillance - Policy Statement

New Members

New members in Category A and B of the Loudoun County Fire and Rescue Services shall not be assigned to emergency response duties (risk duties) until certified as fit for duty by the service:

1. Applicants shall complete the entry medical examination after completion of the application process. The applicant's medical history, to include history of communicable diseases and vaccinations, will be obtained during the entry medical examination.
2. New members shall receive Tuberculosis skin testing prior to assignment to risk duties or provide written proof of any previous TB test results within 2 weeks of joining the fire-rescue system. See Tuberculosis Testing Policy, in Section V of this plan.
3. New members will show written proof of immunity for Chickenpox, Measles, Mumps and Rubella.
4. New members shall receive exposure control and HBV immunization education and training prior to assignment to risk duties. Education and training will include fit testing of the Particulate Respirator Face Mask (N95-#1870).
5. New members will be offered HBV immunization prior to assignment to risk duties. Titer testing will be conducted, if deemed necessary by the Loudoun County Public Health Department, after the completion of HBV immunization. See Hepatitis B Vaccination Policy, in Section V of this plan.
6. New members will be offered baseline blood testing for HIV, hepatitis B and hepatitis C.

Annual examination, testing and training

Members in Category A and B shall obtain annual:

1. Medical examination (career personnel only).
2. Tuberculosis skin testing.
3. Exposure control education and training, to include fit testing of the Particulate Respirator Face Mask.

Work Restriction Guidelines

Members should not work when they are ill or have obtained an injury, which may effect their performance. Members who work in these situations pose a risk to themselves, co-workers and patients. The table below is a summary of suggested work restrictions for health care personnel exposed to or infected with infectious diseases of importance in health care settings, in the absence of state and local regulations (modified from ACIP recommendations):

Table #6

DISEASE/PROBLEM	WORK RESTRICTIONS/DURATION
Conjunctivitis (pink eye)	Restrict from patient contact and contact with patient environments until discharge ceases.
Cytomegalovirus Infections (CMV)	No restriction.
Diarrheal Diseases <ul style="list-style-type: none">Acute Stage (diarrhea with other symptoms)Convalescent Stage, <i>Salmonella</i> spp.	<ul style="list-style-type: none">Restrict from patient contact, with patient environments, and food handling until symptoms resolve.Restrict from care of high-risk patients until symptoms resolve. Consult with local physicians and state health authorities regarding need for negative stool cultures.
Diphtheria	Exclude from duty until antimicrobial therapy completed and 2 cultures obtained \geq 24 hours apart are negative.
Enteroviral Infections	Restrict from care of infants, neonates, and immunocompromised patients and their environments until symptoms resolve.
hepatitis A	Restrict from patient contact, contact with patient environments and food handling until 7 days after onset of jaundice.
hepatitis B <ul style="list-style-type: none">Members with acute or chronic hepatitis B surface antigenemia who do not perform exposure-prone procedures.Members with acute or chronic hepatitis B surface antigenemia who perform exposure-prone procedures.	<ul style="list-style-type: none">No restrictions*; refer to state regulations; standard precautions should always be observed.Do not perform exposure-prone invasive procedures until counsel from an expert review panel has been sought. Panel should review and recommend procedures the worker can perform, taking into account specific procedure as well as skill and techniques of worker. Standard precautions should always be observed. Refer to state regulations. Until hepatitis B e antigen is negative.

hepatitis C	No recommendation.
Herpes Simplex <ul style="list-style-type: none"> • Genital • Hands (herpetic window) • Orofacial 	<ul style="list-style-type: none"> • No restriction. • Restrict from patient contact and contact with patient environments until lesions heal. • Evaluate for need to restrict from care of high-risk patients.
Human Immunodeficiency Virus (HIV)	Do not perform exposure-prone invasive procedures until counsel from an expert review panel has been sought. Panel should review and recommend procedures the worker can perform, taking into account specific procedure as well as skill and techniques of worker. Standard precautions should always be observed. Refer to state regulations.
Impetigo	May work, but no patient contact until discharge has subsided and crusts are healed.
Measles <ul style="list-style-type: none"> • Active • Post exposure (susceptible members) 	<ul style="list-style-type: none"> • Exclude from duty until 7 days after the rash appears. • Exclude from duty from 5th day after 1st exposure through 21st day after last exposure and/or 4 days after rash appears.
Meningococcal Infections	Exclude from duty until 24 hours after start of effective therapy.
Mumps <ul style="list-style-type: none"> • Active • Post exposure (susceptible members) 	<ul style="list-style-type: none"> • Exclude from duty until 9 days after onset of parotitis. • Exclude from duty from 12th day after 1st exposure through 26th day after last exposure or until 9 days after onset of parotitis.
Pediculosis	Restrict from patient contact until treated and observed to be free of adult and immature lice.
Pertussis <ul style="list-style-type: none"> • Active • Post exposure (asymptomatic personnel) • Post exposure (symptomatic personnel) 	<ul style="list-style-type: none"> • Exclude from duty from beginning of catarrhal stage through 3rd week after onset of paroxysms or until 5 days after start of effective antimicrobial therapy. • No restriction, prophylaxis recommended. • Exclude from duty until 5 days after start of effective antimicrobial therapy.

<p>Rubella (German Measles)</p> <ul style="list-style-type: none"> • Active • Post exposure (symptomatic personnel) 	<ul style="list-style-type: none"> • Exclude from duty until 5 days after rash appears. • Exclude from duty from 7th day after 1st exposure through 21st day after last exposure.
Scabies	Restrict from patient contact until cleared by medical evaluation.
<p>Staphylococcus aureus infection</p> <ul style="list-style-type: none"> • Active, draining skin lesions • Carrier state 	<ul style="list-style-type: none"> • Restrict from contact with patients and patient environment, or food handling until lesions have resolved. • No restriction, unless personnel are epidemiologically linked to transmission of the organism.
Streptococcal infection, group A	Restrict from patient care, contact with patient environments, or food handling until 24 hours after adequate treatment started.
<p>Tuberculosis</p> <ul style="list-style-type: none"> • Active disease • PPD converter 	<ul style="list-style-type: none"> • Exclude from duty until proved noninfectious. • No restriction.
<p>Varicella (chicken pox)</p> <ul style="list-style-type: none"> • Active • Post exposure (susceptible personnel) 	<ul style="list-style-type: none"> • Exclude from duty until all lesions dry and crust. • Exclude from duty from 10th day after 1st exposure through 21st day (28th day if VZIG given) after last exposure.
<p>Zoster</p> <ul style="list-style-type: none"> • Localized, in healthy person • Generalized or localized in immunosuppressed person • Post exposure (susceptible personnel) 	<ul style="list-style-type: none"> • Cover lesions; restrict from care of high-risk patients† until all lesions dry and crust. • Restrict from patient contact until all lesions dry and crust. • Restrict from patient contact from 10th day after 1st exposure through 21st day (28th day if VZIG given) after last exposure or, if varicella occurs, until all lesions dry and crust.
Viral respiratory infections, acute febrile	Consider excluding from the care of high-risk patients‡ or contact with their environment during community outbreak of RSV and influenza until symptoms subside.
SARS	Exclude from duty until proved noninfectious.
Mononucleosis	Follow physician direction.
Rash/Wounds (multiple-open)	Exclude from duty until open areas can be covered & sealed to prevent blood/OPIM from penetrating bandage into open areas.

* Unless epidemiologically linked to transmission of infection.

† Those susceptible to varicella and who are at increased risk of complications of varicella, such as neonates and immunocompromised persons of any age.

‡ High-risk patients as defined by the ACIP for complications of influenza.

If you have a condition, which is not covered in the table above and have any hesitation of whether or not you should work, contact the Designated Infection Control Officer.

For members and patients who are allergic to latex, refer to the Latex Free Care Protocol.

SECTION III. METHODS OF COMPLIANCE

Body Substance Isolation

All blood or other potentially infectious materials of all individuals shall be handled as if contaminated by a bloodborne pathogen.

Under circumstances in which differentiation between body fluid types is difficult or impossible, all body fluids shall be considered potentially infectious materials.

Hand Washing and Other General Hygiene Measures

- Hand washing is a primary infection control measure, which is protective of both the member and the individual (patient). Appropriate hand washing must be diligently practiced. Members shall wash hands and forearms thoroughly using soap, water and good friction for at least 15 seconds as soon as feasible after removing gloves or immediately as they become contaminated. Be sure to clean under fingernails. The use of anti-bacterial or anti-microbial products should not be used for routine hand washing.
- Health care workers should not wear acrylic or artificial fingernails or extensions since they can harbor pathogens. Natural fingernails shall be 1/4" past the finger tip and no longer.
- The wearing of rings and bracelets should be limited.
- When other skin areas become contaminated, the skin will be washed with soap, water and good friction for at least 15 seconds.
- When contamination includes piercing of mucous membrane or the skin barrier through events as needlestick, cuts, abrasions, bites (parenteral) or contamination into a recent new open wound, the exposed member should thoroughly wash the site using soap, water and good friction for at least 15 seconds.
- In the absence of hand washing facilities, commercial waterless antiseptic hand rinses (alcohol based foam or gel), in conjunction with cloth/paper towels, should be utilized following the manufacturer's instructions. When these alternatives are used, contaminated hands or other skin areas shall also be washed with soap and water as above as soon as feasible.
- Waterless antiseptic hand rinses should not be used for routine handwashing.
- If mucous membranes (eyes, nose, mouth) come in contact with blood or other potentially infectious materials, the mucous membranes shall be flushed with water immediately for a period of 10 minutes.
- Periodic application of commercial moisturizing hand creams/lotions preserves the integrity of the skin by limiting chapping and cracking. Caution: Petroleum-based hand creams/lotions can adversely affect glove integrity.

- Any open wounds, lesions, or sores of the member should be covered and protected. If the area cannot be covered and protected appropriately, and at the discretion of the member's supervisor, the member should be reassigned from the job responsibilities where "reasonable exposure" is likely, until the resolution of the problem. Refer to Work Restriction Guidelines in Section II of this plan.
- Eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lenses are prohibited in work areas where there is a reasonable likelihood of exposure to blood or other potentially infectious materials. Therefore these activities are prohibited in decontamination areas, near contaminated waste containers and training areas involving blood or OPIM. Loudoun County Fire & Rescue Services recommends these activities not be conducted in the patient compartment of ambulances. The application of hand cream/lotion is permitted.
- Food and drink shall not be kept in shelves, cabinets or on countertops or bench tops where blood or other potentially infectious materials are present (i.e., patient compartment of ambulances, near contaminated waste containers, evidence storage areas, training areas involving blood or OPIM).
- Although current patient care procedures do not advocate the suctioning of venom from the snakebite site, it should be reiterated that mouth suctioning is prohibited.
- Members shall use engineering and work practice controls to minimize splashing, spraying, spattering, and generation of droplets during procedures involving blood or other potentially infectious materials. Prescribed practices for the particular settings are discussed within this plan.
- Prior to the removal of protective equipment, members remaining on a scene after the patient has been transported should carefully search for and properly remove and dispose of contaminated materials.

Engineering/Work Practice Controls & Personal Protective Equipment:

Engineering and Work Practice Controls shall be used to eliminate or minimize member exposure. Where occupational exposure remains after institution of these controls, personal protective equipment shall also be used. All Engineering Controls and Personal Protective Equipment will be provided, repaired, cleaned, and disposed of at no cost to the member.

Members shall wear personal protective equipment when doing procedures in which exposure to the skin, eyes, mouth, or other mucous membranes is anticipated. The articles to be worn will depend on the expected exposure. A variety of sizes are to be stocked. Members who have allergies to regular gloves may obtain hypoallergenic gloves. All personal protective equipment shall be removed before leaving the work area, shall be placed in assigned containers for storage, washing, decontamination or disposal.

The following Personal Protective Equipment and Engineering Controls will be provided at no cost to the member and utilized by the member:

- Disposable Non-Latex Gloves
- Heavy Duty Rubber/Utility Gloves
- Fire-Rescue Protective Clothing & Gloves

- Disposable Surgical Face Masks
- Particulate Respirator Face Masks (N95-#1870)
 - OSHA Approved Protective Eyeglasses with Side Shields
 - Disposable Pocket Mask with One-Way Valve
 - Disposable Impervious Gowns
 - Disposable Bag-Valve-Masks
- Waterless Antiseptic Hand Rinse
- Color-Coded or Biohazard Symbol Puncture Proof Sharps Container
- Designated Biohazard Waste Seamless Bags (Red Color-Coded)
- Biohazard Symbol Labels
- Bleach or Germicides

EXCEPTION: There is one exception to the requirement for personal protective equipment. The member may choose, temporarily and briefly, under rare and extraordinary circumstances, to forego the equipment. It must be the member's professional judgment that, in this specific instance, using the personal protective equipment would prevent the delivery of health care or public safety services or would pose an increased hazard to the safety of the member or co-members. When one of these excepted situations occurs, the Designated Infection Control Officer is to investigate and document the circumstances to determine if there are ways to avoid it in the future. Exceptions must be limited – this is not a blanket exemption.

Personal Protective & Engineering Control Equipment

Distribution Form

Item	Category I	Category II	Category III	Category IV	Category V
Disposable Non-Latex Gloves	2 BX-100	2 BX-100	1 BX-100	25 Pair	1 BX-100
Rubber Utility Gloves	4 Pair	4 Pair	0	0	0
Disposable Surgical Face Mask	6	6	4	2	2
Disp. Particulate Respirator Face Masks (N95-#1870)	2 BX-20	2 BX-20	1 BX-20	1 BX-20	1 BX-20
Protective Eye Wear	6	6	4	2	2
Pocket Mask	1	2	1	1	1
Gowns	6	6	0	0	0
Disposable Bag Mask	2	2	1	0	1
Antiseptic Waterless Hand Rinse	2	2	1	1	1
Sharps Container	2	2	1	0	1
Biohazard Waste Bags (Red or Label)	100	25	25	0	10
Biohazard Symbol/Labels	100	25	0	0	0
Bleach or Germicide	2	1	1	0	1
Biohazard Waste Receptacle	2	0	0	0	0

Category I Worksite

Category II Ambulances and Medic Units

Category III Engine, Wagon, Truck, Squad

Category IV Tankers, Brush, Jeep

Category V CT Cars, Command, Units, Utility, Staff Car

**Personal Protective & Engineering Control Equipment
INVENTORY FORM**

For Category:____-Vehicle #:_____ -Member Name:_____

Worksite Location: _____,if applicable

Item	Category I	Category II	Category III	Category IV	Category V
Disposable Non-Latex Exam Gloves	(2BX-100)	(2BX-100)	(1BX-100)	(25 Pair)	(1BX-100)
Rubber Utility Gloves	(4 Pair)	(4 Pair)	(0)	(0)	(0)
Disposable Surgical Face Mask	(6)	(6)	(4)	(2)	(2)
Disp. Particulate Respirator Face Masks (N95-#1870)	(2 BX-20)	(2 BX-20)	(1 BX-20)	(1 BX-20)	(1 BX-20)
Protective Eye Wear	(6)	(6)	(4)	(2)	(2)
Pocket Mask	(1)	(2)	(1)	(1)	(1)
Gowns	(6)	(6)	(0)	(0)	(0)
Disposable Bag Mask	(2)	(2)	(1)	(0)	(1)
Antiseptic Hand Rinse	(2)	(2)	(1)	(1)	(1)
Sharps Container	(2)	(2)	(1)	(0)	(1)
Biohazard Waste Bags (Red or Label)	(100)	(25)	(25)	(0)	(10)
Biohazard Symbol/Labels	(100)	(25)	(0)	(0)	(0)
Bleach or Germicide	(2)	(1)	(1)	(0)	(1)
Biohazard Waste Receptacle	(2)	(0)	(0)	(0)	(0)

Category I Worksite
Category II Ambulances and Medic Units
Category III Engine, Wagon, Truck, Squad
Category IV Tankers, Brush, Jeep
Category V CT Cars, Command, Units, Utility, Staff Car

Need Your Glove Size-Circle one:

SM MED LG XLG

Division Chief/Supervisor: _____ Date: _____

Specific Personal Protective Equipment, Engineering and Work Practice Control Procedures

Protection for Hands

Disposable Non-Latex Gloves:

- will be worn at all times when assisting or directly engaged in patient care activities or training activities which involve blood, body fluids, mucous membranes, non-intact skin, and other potentially infectious materials, including, but not limited to:
 - bleeding control from minimal to spurting blood
 - manually clearing airway
 - oral/nasal suctioning
 - oropharyngeal/nasopharyngeal airway
 - esophageal tracheal combitube airway
 - endotracheal intubation
 - surgical cricothyrotomy
 - drawing bloods or transferring bloods to tubes via Vacutainer adapter
 - intravenous line (IV)
 - subcutaneous & intramuscular injections
 - intraosseous infusion
 - needle thoracostomy
 - childbirth
 - handling amputated limbs or other body parts
 - body removal
- will be worn when assisting on scene by handling or touching contaminated items or surfaces;
- whenever possible, disposable gloves are to be donned prior to entering an emergency incident scene;
- for situations where large amounts of blood are likely to be encountered, it is important that gloves fit tightly at the wrist to prevent blood contamination of hands around the cuff;
- if caring for two or more patients involving blood or other potentially infectious materials, gloves are to be changed between patient contacts (OSHA states not required in mass casualties incident);
- while wearing gloves, avoid handling personal or non-contaminated items such as combs, pens, cab of units, etc. that could become soiled or contaminated;
- replace disposable gloves as soon as feasible when gloves are contaminated, torn, punctured, or when their ability to function as a barrier is compromised; if possible wash hands before donning new gloves.
- when removing gloves, avoid skin contact with the glove's exterior contaminated surfaces and wash hands after removal;
- do not wash or decontaminate disposable/single use gloves for re-use;

Rubber Utility Gloves:

- will be worn during any clean-up/housekeeping/laundry procedures when handling or touching contaminated items or surfaces;
- will be decontaminated for re-use if the gloves are in good condition;
- must be discarded when gloves are cracked, peeling, torn, punctured or show other signs of deterioration (whenever their ability to act as a barrier is compromised);

Protection for Eyes/Nose/Mouth

Members shall wear disposable face masks in combination with eye protection devices (safety glasses with solid side shields) whenever splashes, spray, spatter, or droplets of blood or other potentially infectious materials may be generated and eye, nose, or mouth contamination can be reasonably anticipated. Situations that would require such protection include:

- bleeding control with spurting blood
- childbirth
- if splashing is likely during: manually cleaning airway, oral/nasal suctioning, oropharyngeal/nasopharyngeal airway, esophageal tracheal combitube airway, endotracheal intubation, surgical cricothyrotomy, needle thoracostomy, transferring bloods to tubes (not applicable if vacutainers utilized), treating a patient that is expectorating, vomiting, coughing &/or sneezing
- attending/viewing autopsies (training or investigative)

Disposable Face Masks:

When in contact with patients with suspected or identified airborne communicable disease (such as Tuberculosis, SARS, etc.) or who may have flu-like symptoms and/or may be vomiting, expectorating, coughing &/or sneezing, have the patient wear a disposable surgical face mask.

Members will wear a disposable Particulate Respirator N95 Face Mask when in contact with patients with suspected or confirmed Tuberculosis, SARS, Varicella (Chickenpox), Smallpox or Meningococcal infections.

The Particulate Respirator Face Masks should be stored in plastic and in a manner not to disturb the configuration of the mask.

Refer to the Loudoun County Fire-Rescue Respiratory Protection Program Plan for further information.

Resuscitation Equipment:

- artificial ventilation shall be administered utilizing resuscitation equipment such as disposable resuscitation BVM bags or pocket mouth-to-mask resuscitation masks with one way valves. Mouth to mouth resuscitation will be performed only as a last resort if no other equipment is available.
- disposable resuscitation equipment will be used once and properly disposed of or, if reusable, thoroughly cleaned and decontaminated after each use according to the manufacturer's instructions.

Protection for the Body

A variety of garments can be utilized to prevent occupational exposure. Disposable gowns made of or lined with impervious (fluid proof) materials will be provided for this use, although it is understood that due to time considerations use may be limited in the field.

If the member's uniform is penetrated by blood or other potentially infectious material, the garment shall be removed as soon as possible and placed in a designated biohazard bag (red color coded). The bag will then be placed into the worksites designated laundry container for laundering (additional information on laundering is provided in the Laundry Section of this plan). In addition, members will have an extra uniform available at all times to change into in case of contamination. Uniforms and protective clothing are provided to Category A & B members. The following situations require the use of body protection in addition to gloves, mask and eye protection:

- bleeding control with spurting blood
- childbirth
- gross amounts of blood or OPIM
- if soiling is likely, when handling and cleaning contaminated instruments/surfaces
- attending/viewing autopsies (training or investigative)

Grossly contaminated disposable items such as gloves, masks, gowns, patient care supplies, resuscitation equipment and contaminated damaged rubber utility gloves are to be disposed of in designated biohazard waste bag (red color coded) prior to leaving the work area. (to define grossly contaminated - refer to the Regulated Waste definition in Glossary) To secure the contents of the bag, the top of the bag will be twisted, folded over and taped. The bag will be labeled with the name of the originating organization/agency, unit number, incident number/patient number and date.

Contaminated non-disposable personal protection devices and non-disposable patient care equipment will be decontaminated as soon as feasible prior to leaving the work area. If circumstances arise in which the contaminated equipment cannot be decontaminated promptly, the equipment must be labeled with biohazard symbol until decontaminated properly. If the outside of the equipment is also contaminated, place in a leak proof designated biohazard bag (red color-coded or with biohazard symbol). Once decontaminated, equipment can be placed in service and stored for reuse.

Contaminated laundry will be removed as soon as feasible and placed in a leak proof designated biohazard bag (red color-coded or with biohazard symbol). These bags are then deposited into the designated contaminated laundry container located at each worksite (additional information on laundering is provided in the Laundry Section of this plan).

Special Sharps Management & Precautions

- Loudoun County Fire and Rescue Services utilizes self-sheathing intravenous and syringe needle systems. Immediate and direct placement into the disposable sharps leak-proof/puncture-proof container after use is required;
- Contaminated needles and other contaminated sharps shall not be bent, recapped, or removed. Shearing or breaking of contaminated needles is prohibited.

- Contaminated needles and disposable sharps shall be discarded without recapping, directly after use, in a disposable sharps leak-proof/puncture-proof container;
- The transfer of blood specimens by needle and syringe is strongly discouraged. When possible the Vacutainer adapters will be utilized.
- Sharps containers are to be easily accessible to members and located as close as is feasible to the immediate area where sharps are used or found. If sharps are carried to the scene of patient assistance from the unit, a small leak-proof/puncture-proof container should be carried to the scene as well;
- In rare circumstances, if recapping is needed the following two techniques will be utilized:
 - one-handed "scoop" recapping technique, using the needle itself to pick up the cap, pushing cap and sharp together against a hard surface to ensure a tight fit.
 - mechanical device technique, holding the cap with forceps to place over the needle and ensuring a tight fit.

CAUTION- contaminated needles can go through the cap;

- If the use of reusable sharps is ever utilized in the fire-rescue system, as soon as possible after use, reusable contaminated sharps are to be placed in the reusable sharps container until properly processed (reusable needles should not be removed from the syringe body);
- Reusable containers are not to be opened, emptied, or cleaned manually or in any other manner which will expose members to the risk of percutaneous injury. **DO NOT** reach by hand into a container which stores reusable contaminated sharps.
- Sharps containers must be closable, puncture resistant, labeled or color-coded, and leak proof on sides and bottom, and maintained upright throughout use. If there is a chance of leakage from this container or the outside of the container is contaminated, place the container in a designated biohazard bag (red color coded) with biohazard symbol and secured.
- Overfilling of sharp's containers creates a hazard when needles protrude from openings. Containers 3/4 full must be promptly closed and replaced at the Emergency Department of Loudoun Hospital Center. (Decontaminated in the case of reusable sharps). All fire-rescue members are responsible to maintain sharp containers.
- Clean up broken glass, which may be contaminated using mechanical means such as a brush and dustpan, tongs, or forceps. **DO NOT** pick up directly with the hands. Contaminated broken glass is also to be placed in disposable sharps puncture-proof containers.
- Sharp containers will be maintained on each unit (apparatus, ambulance, ALS Response Unit, etc.), in County owned fire-rescue vehicles, and at worksites, to include the training center.

**Examples of Recommended Personal Protective Equipment for Worker Protection
Against HIV and HBV Transmission(*1) in Prehospital(*2) Settings**

Guidelines for Prevention of Transmission of HIV and HBV to Health Care and Public Safety Workers
Reprinted from DHHS (NIOSH) Centers for Disease Control, 1987, HHS Publications No. 89-107, Table 4, Page 28

Task or Activity	Gloves	Disposable Gown	Mask(*3)	Protective Eyewear
Bleeding control with with spurting blood	Yes	Yes	Yes	Yes
Bleeding control with with minimal bleeding	Yes	No	No	No
Emergency childbirth	Yes	Yes	Yes-if splashing is likely	Yes-if plashing is likely
Blood drawing	Yes (*4)	No	No	No
Starting an I.V. (intravenous line)	Yes	No	No	No
Endotracheal intubation, esophageal obturator use	Yes	No	Yes-if splashing is likely	Yes-if splashing is likely
Oral/nasal if suctioning, manually cleaning airway	Yes(*5)	No	Yes-if splashing is likely	Yes splashing is likely
Handling & cleaning instruments with microbial contamination	Yes	Yes-if soiling is likely	No	No
Measuring blood pressure	No	No	No	No
Measuring temperature	No	No	No	No
Giving an injection	Yes	No	No	No

(*1) The examples provided in this table are based on application of universal precautions. Universal precautions are intended to supplement rather than replace recommendations for routing infection control, such as handwashing and using gloves to prevent gross microbial contamination of hands (e.g., contact with urine or feces).

(*2) Defined as setting where delivery of emergency health care takes place away from a hospital or other health care facility.

(*3) Refers to protective masks to prevent exposure of mucous membranes to blood or other potentially contaminated body fluids.

(*4) For clarification, refer to DHHS (NIOSH) CDC, 1987, HHS Publications No. 89-107

(*5) While not clearly necessary to prevent HIV or HBV transmission unless blood is present, gloves are recommended to prevent transmission of other agents (e.g., Herpes simplex).

Precautions for Law Enforcement Activities:

Fights and Assaults:

Law enforcement and correctional facility officers are exposed to a range of assaultive and disruptive behavior through which they may potentially become exposed to blood or other potentially infectious materials. Behaviors of particular concern are biting, attacks resulting in blood exposure, and attacks with sharp objects. Such behaviors may occur in a range of law enforcement situations including arrests, routine interrogations, domestic disputes, and lockup operations, as well as in correctional facility activities. Hand-to-hand combat may result in bleeding and may thus incur a greater chance for blood-to-blood exposure, which increases the chances for bloodborne disease transmission.

Whenever the possibility for exposure to blood or other potentially infectious materials exists, the appropriate protective measures should be taken. In all cases, extreme caution must be used in dealing with a suspect, prisoner or any individual if there is any indication of assaultive or combative behavior. When blood is present and an individual is combative or threatening to staff, disposable non-latex gloves should always be put on as soon as conditions permit. In case of blood contamination of clothing, and extra change of clothing should be available at all times.

Searches and Evidence Handling:

Law enforcement members have potential risks of acquiring HBV, HCV or HIV infection through exposures, which occur during searches and evidence handling. Penetrating injuries are known to occur. Puncture wounds or needlesticks in particular pose a hazard during searches of persons, vehicles, structures, cells, and during evidence handling. The following precautionary measures will assist to reduce the risk of exposure:

- Caution should be used in searching the clothing of suspects. Individual discretion, based on the circumstances at hand, should determine if a suspect or prisoner should empty his own pockets or if the officer should use his own skills in determining the contents of a suspect's clothing.
- A safe distance should always be maintained between the officer and the suspect.
- Wear disposable non-latex gloves if exposure to blood is likely to be encountered.
- Wear disposable non-latex gloves for all body cavity searches.
- If cotton gloves are to be worn when working with evidence of potential latent fingerprint value at the crime scene, they can be worn over disposable non-latex gloves when exposure to blood or other potentially infectious materials may occur.
- Always carry a flashlight, even during daylight shifts, to search hidden areas. Whenever possible, use long-handed mirrors and flashlights to search such areas (i.e., under car seats, etc.).
- If searching a purse (or other type container), carefully empty contents directly from purse, by turning it upside down over a table.

- Clear plastic evidence bags and puncture proof evidence cans/bottles containing a biohazard label will be utilized to store contaminated evidence. Remember, any type of contaminated sharp instruments must be stored in a puncture proof container.
- To avoid tearing disposable non-latex gloves, use evidence tape instead of metal staples to seal evidence.
- Local procedures for evidence handling should be followed. In general, items should be air dried before sealing in plastic.

Not all types of gloves are suitable for conducting searches. Disposable gloves, although not puncture proof, do provide some protection in a puncture situation. There is a direct trade-off between level of protection and manipulability. In other words, the thicker the gloves, the more protection they provide, but the less effective they are in locating objects. Thus, there is no single type or thickness of glove appropriate for protection in all situations. Law enforcement members should select the type and thickness of glove, which provides the best balance of protection and search efficiency.

Law enforcement members and crime scene technicians may confront unusual hazards, especially when the crime scene involves violent behavior, such as a homicide where large amounts of blood are present. Disposable non-latex gloves shall be available and worn in this setting. In addition, for very large spills disposable impervious gowns and disposable shoe covers should be worn. These items will be changed if torn or soiled, and always removed prior to leaving the scene. While wearing gloves, avoid handling personal or non-contaminated items, such as combs, pens, steering wheel of vehicles, etc. that could become contaminated.

Disposable face masks and splash proof goggles or OSHA approved protective eyeglasses with side shields are required for laboratory and evidence technicians whose jobs which entail potential exposures to blood or other potentially infectious materials via a splash to the face, mouth nose or eyes.

Airborne particles of dried blood may be generated when a stain is scraped. It is required that disposable masks and protective eyewear be worn by laboratory or evidence technicians when removing blood stains for laboratory analysis.

While processing the crime scene, members should be alert for the presence of sharp objects such as hypodermic needles, knives, razors, broken glass, nails, or other sharp objects.

Handling Deceased Persons and Body Removal:

For detectives, investigators, evidence technicians, and others who may have to touch or remove a body, the response should be the same as for situations requiring CPR or first aid: wear gloves and cover all cuts and abrasions to create a barrier. Eye protection, mask, and gown should be worn if there is any chance of splashing to occur. Any areas exposed to blood or OPIM should be carefully washed as soon as possible. The precautions to be used with blood and deceased persons should also be used when handling amputated limbs, hands, or other body parts.

Autopsies:

Disposable masks, protective eyewear, and waterproof protective gown or apron will be worn when viewing a autopsy due to the opportunity for exposure to blood splashes or other potentially infectious materials. Many laboratories have more detailed standard operating procedures. Their procedures should be followed.

Decontamination and Disposal:

Prisoners may spit or throw feces. Sometimes these substances have been purposefully contaminated with blood. These materials should be removed with a paper towel after donning gloves, and the area then decontaminated with appropriate germicide. Following cleanup, grossly contaminated towels and gloves should be disposed of in a red or labeled bag. (See Housekeeping & General Decontamination Procedures section)

Housekeeping and General Decontamination Procedures

General Policy:

All units, vehicles and worksites will be maintained in a clean and sanitary condition. Environmental surfaces such as walls, floors, and other surfaces not contaminated with blood or other potentially infectious materials should be cleaned routinely.

When inspecting equipment for contamination, decontamination should occur before storing, reuse, servicing at worksite or shipping for servicing. Equipment, which has not been fully de-contaminated must have a visible biohazard symbol attached, with added information about the portions of the equipment that remain contaminated.

Clean contaminated work surfaces and equipment with appropriate disinfectant (for appropriate disinfectant, see following section "Management of Contaminated Equipment or Surface Areas):

- after completing procedures;
- immediately or as soon as feasible when contaminated or after any spill of blood or OPIM;
- at the end of the work shift if the surface may have become contaminated since the last cleaning.

Under no circumstances will kitchens, bathrooms, living areas or clean storage areas be used for decontamination or storage of contaminated equipment or infectious waste.

Fire-rescue members categorized in List A are responsible to inspect worksites, equipment and any reusable containers/receptacles on a daily basis and after every incident, and to decontaminate if needed.

Fire-rescue members categorized on List B are to inspect worksites, equipment, and reusable containers/receptacles on a quarterly and after every incident, and to decontaminate if needed.

Management of Contaminated Equipment or Surface Areas:

- Reusable equipment that has come into contact with only intact skin and has been visibly contaminated with blood or OPIM will be washed with hot soapy water, rinsed with clean water. It shall then be subjected to **Intermediate-Level Disinfection** by wiping the equipment down with an EPA/Hospital approved and registered "hospital disinfectant" or a bleach and water solution of 1:100 dilution ratio(1/4 cup to 1 gallon of water). The disinfectant should be allowed to air dry.
- Reusable instruments or devices that come into contact with intact mucous membranes shall be washed with hot soapy water and rinsed with clean water. They shall then be subjected to **High-Level Disinfection** by submerging in an EPA/Hospital approved and registered "sterilant" for a period of 20 minutes or as directed by the manufacturer. The disinfectant should be allowed to air dry.
- Reusable instruments or devices that penetrates intact skin or mucous membranes will require **Sterilization**.

- Spills of blood or other potentially infectious materials should first be absorbed and removed with disposable towels or another absorbent material. The area will be washed with hot soapy water, rinsed with clean water. The area shall then be subjected to **Intermediate-Level Disinfection** by wiping the surface down with an EPA/Hospital approved and registered "hospital disinfectant" or a bleach and water solution of 1:100 dilution ratio(1/4 cup to 1 gallon of water). The disinfectant should be allowed to air dry.
- For large spills of blood or other potentially infectious materials, flood the contaminated area with a EPA/Hospital approved and registered "hospital disinfectant" prior to absorbing and removing the spill. The area will be washed with hot soapy water, rinsed with clean water. The area shall then be subjected to **Intermediate-Level Disinfection** by wiping the surface down with an EPA/Hospital approved and registered "hospital disinfectant" or a bleach and water solution of 1:100 dilution ratio(1/4 cup to 1 gallon of water). The disinfectant should be allowed to air dry.

(Contaminated housekeeping materials are considered regulated waste.)

Reprocessing Methods for Equipment Used in the Pre-Hospital(1) Health-Care Setting

Sterilization:

- Destroys:** All forms of microbial life including high numbers of bacterial spores.
- Methods:** Steam under pressure (autoclave), gas (ethylene oxide), dry heat, or immersion in EPA-approved chemical "sterilant" for prolonged period of time, e.g., 6-10 hours or according to manufacturers' instructions. Note: liquid chemical "sterilants" should be used only on those instruments that are impossible to sterilize or disinfect with heat.
- Use:** For those instruments or devices that penetrate skin or contact normally sterile areas of the body, e.g., scalpels, needles, etc. Disposable invasive equipment eliminates the need to reprocess these types of items. When indicated, however, arrangements should be made with a health-care facility for reprocessing of reusable invasive instruments.

High-Level Disinfections:

- Destroys:** All forms of microbial life except high numbers of bacterial spores.
- Methods:** Hot water pasteurization (80-100 C, 30 minutes) or exposure to an EPA-registered "sterilant" chemical as above, except for a short exposure time (10-45 minutes or as directed by the manufacturer).
- Use:** For reusable instruments or devices that come into contact with mucous membranes (e.g., laryngoscope blades, endotracheal tubes, etc.)

Intermediate-Level

Disinfection:	Destroys:	<i>Mycobacterium tuberculosis</i> , vegetative bacteria, most viruses, and most fungi, but does not kill bacterial spores.
	Methods:	EPA-registered "hospital disinfectant" chemical germicides. OSHA no longer requires disinfectants to be tuberculocidal; commercially available hard-surface germicides or solutions containing at least 500 ppm free available chlorine (a 1:100 dilution of common household bleach - approximately 1/4 cup bleach per gallon of tap water).
	Use:	For those surfaces that come into contact only with intact skin, e.g., stethoscopes, blood pressure cuffs, splints, etc. and have been visibly contaminated with blood or bloody body fluids. Surfaces must be pre-cleaned of visible material before the germicidal chemical is applied for disinfection.

Low-Level

Disinfection:	Destroys:	Most bacteria, some viruses, some fungi, but not <i>Mycobacterium tuberculosis</i> or bacterial spores.
	Methods:	EPA-registered "hospital disinfectants" (not required to be tuberculocidal.).
	Use:	These agents are excellent cleaners and can be used for routine housekeeping or removal of soiling in the absence of visible blood contamination.

Environmental

Disinfection:	Environmental surfaces which have become soiled, should be cleaned and disinfected using any cleaner or disinfectant agent which is intended for environmental use. Such surfaces include floors, woodwork, ambulance seats, countertops, etc.
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IMPORTANT: To assure the effectiveness of any sterilization or disinfection process, equipment and instruments must first be thoroughly cleaned of all visible soil.

(1) Defined as setting where delivery of emergency health-care takes place prior to arrival at hospital or other health-care facility.

Laundry:

Members are not permitted to take contaminated laundry home for laundering. Contaminated laundry is to be washed in station washers in accordance with these procedures.

Contaminated laundry includes linens, work-clothes/uniforms, and fire-rescue protective clothing.

- Bags containing contaminated linens owned by Loudoun Hospital Center are returned to Loudoun Hospital Center for proper decontamination and laundering.
- Bags containing contaminated linens owned by other health care facilities are to be returned to that facility for proper decontamination and laundering.
- Bags containing contaminated work-clothes/uniforms and linens owned by the Department/Agency, will be placed into the worksite's contaminated laundry container for proper decontamination and laundering in the station's washing machine. If the station does not have laundering appliances, contact the Infection Control Officer who will coordinate with the contracted laundry service for the contaminated laundry to be picked up for proper decontamination and laundering. Depending on the cost involved, a decision may be made to purchase a new item versus decontamination and laundering. Information on our contracted vendor for protective gear is listed below (do not contact directly).
- Bags containing contaminated Fire-Rescue Protective Gear will be placed into the designated biohazard red bag or bag with biohazard symbol. Contact the Infection Control Officer who will coordinate with the contracted laundry service for the contaminated gear to be picked up for proper decontamination and laundering. Information on our contracted vendor for protective gear is listed below (do not contact directly).

When handling contaminated laundry, members are to wear rubber utility gloves (see Protection for Hands in this section) and other appropriate personal protective equipment. Do not rinse laundry.

Contaminated laundry shall be handled as little as possible and placed into a designated biohazard red bag or bag with biohazard symbol in the location of use.

If at any time the initial biohazard bag is leaking or has outside contamination, it will be placed into an identical second biohazard bag.

Laundry containers at each worksite may be any color including red, but must be marked with a biohazard symbol. Laundry containers must prevent soak-through and/or leakage of fluids to the exterior.

The contracted laundering service for the Loudoun County Department of Fire-Rescue Services for Work-Clothes/Uniforms/Linens/Fire-Rescue Protective Gear is as follows (do not contact directly):

Solutions Safety Services, Inc.

12 Windermere Court

Owings Mills, Maryland 21117

1-800-226-4690, ext. 193 or 410-581-4845; Fax #: 410-913-4886

Regulated Waste:

Includes:

- liquid or semi-liquid blood or other potentially infectious materials;
- contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed;
- items that are caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling;
- contaminated sharps;
- pathological (tissue fragments) wastes containing blood or other potentially infectious materials.

Waste Containers:

Any of the substances listed above must be placed in containers, which are closable; constructed to contain all content and prevent leakage of fluids during handling, storage, or transport. Containers must be closed prior to moving/removal.

The Loudoun County Fire-Rescue Services will utilize the following containers for waste as designated below (the disposal of these containers for the Loudoun County Fire-Rescue Services is also indicated):

- **Designated Biohazard Waste Bag** (red color coded or with Biohazard Symbol) will be used for:
 - Disposable Contaminated waste
 - Re-usable Contaminated patient care equipment and personal protective equipment prior to decontamination.
 - Contaminated Laundry to include linens, work-clothes/uniforms and fire-rescue protective gear.
- **If bag leaks or the outside of the bag becomes contaminated, the initial bag will be placed into a second biohazard bag. The top of the bag will be twisted, folded over and secured with tape. The bag will then require a label, which advises the name of the originating organization, unit number, incident number/patient number and date.**
- **The biohazard waste bag will be disposed of at the health care facility receiving the patient or placed in the appropriate biohazard waste container at the worksite for pickup by the County's contracted vendor.** The County of Loudoun has contracted with Sci-Med, Inc. to provide each worksite with biohazard waste containers and for the removal and proper disposal of all regulated biohazard waste from each worksite.

- **The disposal and replacement of biohazard waste containers is to be coordinated by the Designated Infection Control Officer (D.O.). Worksites are to notify the D.O. when disposal and replacement is needed.**
- **Sharp Containers** will be used for Disposable Contaminated Sharps and must be closable, puncture proof and leak proof. The container may be any color including red, but must be marked with a Biohazard Symbol. If the outside of the container becomes contaminated, place container into designated biohazard bag (red color coded or symbol). Sharp Containers will be taken to the Loudoun Hospital Center for exchange when 3/4 full;
- **Laundry Containers** will be used to place bags containing contaminated laundry owned by the Department and will be located at each worksite. These containers may be any color including red, but must be marked with a Biohazard Symbol. Laundry containers must prevent soak-through and/or leakage of fluids to the exterior. (see Laundry in this section of this plan for further information on disposal.)
- **Equipment Containing Contaminated Liquids** will be marked with a biohazard symbol and secured for transport to the patient's receiving health care facility. The contaminated liquids are to be disposed of in the facilities biohazard/contamination area. Fire-rescue members, not hospital personnel, will decontaminate the container at the hospital. Fire-Rescue members are required to wear personal protective equipment when disposing of liquids.

Communication of Hazards to Members:

Members will be informed of hazards through a system of orange-red color-coding or biohazard symbol, as well as in training programs, which is discussed in the Member Education & Training section of this plan.

Biohazard symbols shall be affixed to containers of regulated waste containing blood or other potentially infectious material, and to other containers used to store or transport blood or other potentially infectious material. Contaminated equipment shall also be labeled in this manner. Information about the portions of the equipment that remain contaminated shall be added to the label.

Biohazard symbols shall be fluorescent orange or orange-red with lettering or symbols in a contrasting color. The label is either to be an integral part of the container or affixed as close as feasible to the container by a method which prevents loss or unintentional removal of the label. The label shall have: the **biohazard symbol** and the text **BIOHAZARD**.

Red color coded bags do not require a biohazard symbol.

The red color-coding or biohazard symbol described here are not required in the following instances:

- when individual containers of blood or other potentially infectious materials are placed in labeled containers during storage, transport, shipment or disposal;
- when regulated waste has been decontaminated.

SECTION IV. COMPLIANCE MONITORING

Personal Protective Equipment and Engineering Controls on units, vehicles, and at the worksite will be inspected and maintained or replaced on a regular schedule as specified below:

- **Category A members & supervisors - Daily Inspection**
- **Category B members & supervisors - Quarterly Inspection**

The Equipment Distribution/Inventory Form will be utilized for documentation for these inspections.

Category A and B members are to submit their inspection forms to their Division Chief/ Supervisor on a quarterly basis. The Division Chief will review, note any problems or deficiencies, and submit the inspection forms to the Primary Department's Designated Infection Control Officer on a quarterly basis due the fifteenth or the next business day of each of the following months: January, April, July, & October.

As you use disposable supplies on incidents, replace them through the concerned volunteer company or receiving health care facility. If certain supplies are not available through the volunteer companies or receiving health care facility, and supplies are below the required number as listed on the Distribution/Inventory Chart, notify your Supervisor/Officer that replacement is needed. The Supervisor/Officer will notify the Department's or Agencies Designated Infection Control Officer.

The Designated Infection Control Officer is responsible to assist in the procurement of controls and protective equipment for their Department/Agency and to ensure their use.

All members are responsible to advise the Designated Infection Control Officer if they feel any of the control items or protective equipment are not effective for their situations.

The Fire & Rescue Exposure Control Committee will review and determine the effectiveness of personal protective equipment, engineering and work practice controls continually as exposures are reported, in addition to the six months after implementation and annual reviews. Revisions may be made prior to the review if required.

DISCIPLINE POLICY

Failure to comply with the Loudoun County Fire-Rescue Service's Exposure Control procedures is not acceptable and may result in disciplinary actions in accordance with Human Resource Handbook Policy 10 as outlined below.

General Policies

- **Purpose:** Disciplinary action is a tool available to managers to deal effectively with members whose performance or conduct is unacceptable.

In many cases disciplinary action will take a progressive course, beginning with minor action and escalating to more serious action only if needed to correct the misconduct or unsatisfactory performance. However discipline need not follow any specific sequence. Even a single major incident of misconduct or unsatisfactory performance may be cause for severe action, including

immediate termination, irrespective of whether previous disciplinary actions have been taken against the employee.

- **Considerations:** In making decisions regarding appropriate disciplinary action, managers should consider a series of factors, including:
 - (1) the nature and seriousness of the problem,
 - (2) the level of the employee's position,
 - (3) the effect of the problem on the efficiency and /or credibility
of County operations,
 - (4) the quality of the employee's previous performance and conduct,
 - (5) any explanation provided by the employee,
 - (6) any mitigating circumstances, and
 - (7) the realistic prospect that the problem can or will be corrected.
- **Consultation with Human Resources:** Before initiating a disciplinary action, the responsible supervisor, manager, or Department Head must discuss the issue with Human Resources.

SECTION V. VACCINATION & TESTING POLICIES

hepatitis B Vaccination - General Statement of Policy

All members holding a job classification which has been categorized in List A and B in Section II. Exposure Determination/Risk Assessment will be offered the hepatitis B vaccination series at the County's cost. Antibody (titer) testing will be offered several months after the completion of the 3rd series of HBV vaccination to ensure appropriate protection levels have been obtained. In addition, these members will be offered post-exposure evaluation and follow-up at the County's cost should they experience an exposure incident while performing their job duties.

All medical evaluations and procedures including the hepatitis B vaccination series, whether prophylactic or post-exposure, will be made available to members at a reasonable time and place.

This medical care will be performed by or under the supervision of a licensed physician, physician's assistant, or nurse practitioner. Medical care and vaccination series will be according to the most current recommendations of the U.S. Public Health Service. A copy of the bloodborne pathogens standard will be provided to the healthcare professional responsible for the member's hepatitis B vaccination.

INOVA Emergency Care Center-Occupational Health in Reston, Virginia is the agency administering the member's hepatitis B vaccinations. This agency has a copy of the bloodborne pathogens standard. For members 18 years of age or under, a parent or guardian must accompany the employee when receiving the vaccine.

All laboratory tests will be conducted by an accredited laboratory at no cost to the members. The accredited laboratory utilized by INOVA is INOVA Reference Lab located at 4320 Seminary Road, Alexandria, Virginia 22304.

hepatitis B Vaccination

- The vaccination is a series of three injections. The second injection is given one month from the initial injection. The final dose is given six months from the initial dose.
- The vaccination will be made available to members after they have attended training on bloodborne pathogens and hepatitis B - Vaccination Program. Those Category List A or B job classification members consenting to receive the vaccine must receive the first of the three series within 10 days of initial assignment and prior to working in an at-risk position. At the time of administration of the vaccine, INOVA will have you complete a Consent Form for the hepatitis B vaccination.
- Members who do not begin their HBV vaccinations during their entry medical examination may receive the HBV vaccination at any time through INOVA. No appointment is necessary. The vaccine's first of the three series is to be received prior to working in an at-risk position.

- The vaccination series will not be made available to members who have previously received the complete hepatitis B vaccination series; to any member who has immunity as demonstrated through antibody testing; or to any member for whom the vaccine is medically contraindicated. Members who have a documented allergy to yeast will be offered Heptavax HB (Plasma derived) vaccine.
- Members who chooses not to take the hepatitis B vaccination will be required to sign a declination form, with the reason for non-participation noted, and return it to the Department's Designated Infection Control Officer for filing at the Department of Fire & Rescue Services. Members, who initially refuse vaccination, may later receive the vaccination upon request.
- At this time the U.S. Public Health Service is not recommending a routine booster. If recommended at a future date, the booster will be made available to the member at no cost. New CDC guidelines recommends reevaluation (titer testing) over ten years following the initial vaccination series to determine booster needs.

Overview of the hepatitis B Virus

Hepatitis B is caused by a virus that is spread through blood to blood contact (transfusions, needle sticks), mucous membrane contact (saliva or sputum), or sexual contact. Contact with infected blood and blood components is a prime means for transmission among health care providers. In addition, health care providers performing certain types of invasive procedures have transmitted Hepatitis to patients.

The patient with hepatitis B can be very difficult to identify since many individuals will only have "flu" symptoms, which are overlooked. Up to 50% of people with the hepatitis B infection will be unaware that they have contracted the virus. The incubation period for hepatitis B is very long; from 45 to 160 days following exposure.

The virus can survive for long periods of time in the environment and had been found in some cases to be alive on surfaces for six weeks or longer.

The hepatitis B virus has shown to have long term serious effects for many of the individuals who acquire it. This virus is a major cause of chronic Hepatitis, cirrhosis and primary hepatocellular carcinoma (liver cancer) worldwide. In the United States it is estimated that 4,000 persons die from hepatitis B related cirrhosis each year and 900 persons die from hepatitis B related liver cancer. The overall fatality rate for reported cases generally do not exceed 2%. Seven hundred thousand to one million people are carriers. There is no specific treatment for the disease nor is there a cure once acquired.

It has, therefore, been recommended that efforts be made to eradicate the disease through vaccination of high risk groups. Because fire-rescue and law enforcement members are in a high risk group, having contact with the patient's blood/OPIM and contaminated needles, vaccination for these members is highly recommended.

Questions and Answers

1. What type of vaccine is being used?

Upon the recommendation of Donald A. Sabella, M.D., Medical Director of the Loudoun County Emergency Medical Services, the Physician/Director of the Loudoun County Public Health Department, and INOVA Occupational Health, Loudoun County uses the Recombinant hepatitis B Vaccine.

2. Will the County of Loudoun test members for hepatitis B prior to administering the vaccine?

Due to a predicted low percentage of positive hepatitis B in public safety members in Loudoun County and based upon the recommendation of GlaxoSmithKline (manufacturer of the Recombinant vaccine) and the Center of Disease Control guidelines, the recommendation has been made to provide the vaccination without pre-screening. The risk to individuals who may be hepatitis B antibody positive is the same as to individuals who are hepatitis B antibody negative.

3. Who administers the vaccine?

INOVA Emergency Care Center-Occupation Health located at 11901 Baron Cameron Avenue in Reston, Virginia is the agency that administers the hepatitis B vaccine for Loudoun County. No appointment is necessary.

Members receiving the vaccine should be prepared to remain 20 minutes at the site after receiving the vaccination.

4. What is the route of administration and the dosage of the vaccine?

The vaccine is administered by an intramuscular injection into the deltoid muscle (upper arm).

The vaccination will be given in a series of three injections. Individuals must complete the series to receive the full protection of the vaccine.

ADULT DOSAGE:

10mcg/1.0 ml.

10mcg/1.0 ml.

10mcg/1.0 ml.

SERIES OF THREE INJECTIONS:

Initial Dose Date

One Month After Initial Dose

Six Months After Initial Dose.

5. What kind of adverse reactions (side effects) can I expect?

Recombinant is generally well-tolerated. No serious adverse reactions attributable to the vaccine have been reported during the course of clinical trials. No serious hypersensitivity reactions have been reported. No adverse experiences were reported during clinical trials, which could be related

to changes in the titers of antibodies to yeast. As with any vaccine, there is the possibility that broad use of the vaccines could reveal adverse reactions not observed in clinical trials.

In a group of studies, 3258 doses of vaccine were administered to 1252 healthy adults who were monitored for 5 days after each dose. Injection site and systemic complaints were reported following 17% and 15% of the injections, respectively. The following adverse reactions were reported:

INCIDENCE EQUAL TO OR GREATER THAN 1% OF INJECTIONS

LOCAL REACTION (INJECTION SITE)

Injection site reactions consisting principally of soreness, and including pain tenderness, pruritus, erythema, ecchymosis, swelling, warmth, and nodule formation.

BODY AS A WHOLE

The most frequent systemic complaints include fatigue/weakness; headache; fever (greater than 100 degrees F); and malaise.

DIGESTIVE SYSTEM

Nausea; and diarrhea.

RESPIRATORY SYSTEM

Pharyngitis; lightheadedness; chills; and flushing.

DIGESTIVE SYSTEM

Vomiting; abdominal pains/cramps; dyspepsia; and diminished appetite.

RESPIRATORY SYSTEM

Rhinitis; influenza; and cough.

NERVOUS SYSTEM

Vertigo/dizziness; and paresthesia.

INTEGUMENTARY SYSTEM

Pruritus; rash (non-specified); angioedema; and urticaria.

MUSCULOSKELETAL SYSTEM

Arthralgia including monoarticular; myalgia; back pain, neck pain; shoulder pain; and neck stiffness.

HEMIC/LYMPHATIC SYSTEM

Lymphadenopathy.

PSYCHIATRIC/BEHAVIORAL

Insomnia/disturbed sleep.

SPECIAL SENSES

Earache.

UROGENITAL SYSTEM

Dysuria.

CARDIOVASCULAR SYSTEM

Hypotension.

Potential ADVERSE EFFECTS:

In addition, a variety of adverse effects, not observed in clinical trials with RECOMBINANT, have been reported with HEPTAVAX-B (plasma-derived hepatitis B vaccine). Those listed below are to serve as alerting information to physicians:

Hypersensitivity: An apparent hypersensitivity syndrome of delayed onset has been reported days to weeks after vaccination. This has included the following findings: arthritis (usually transient), fever, and dermatologic reactions such as urticaria, erythema multiforme, or ecchymoses.

Nervous System: Neurological disorders such as optic neuritis, myelitis including transverse myelitis; acute radiculoneuropathy including Guillain-Barre` syndrome; peripheral neuropathy, including Bell's Palsy and herpes zoster.

Hematologic: Thrombocytopenia.

Special Senses: Tinnitus, visual disturbances.

6. Are there any contraindications for the hepatitis B vaccine?

The vaccine is contraindicated in individuals who have allergies to any of the components of the vaccine which are: Yeast, Aluminum hydroxide, and Thimerosal (mercury derivative).

7. Will I be completely protected against hepatitis B?

Studies have shown that greater than 90% of the individuals who receive the Recombinant vaccine develop a protective level of antibodies.

8. What is a "bloodborne exposure"?

A "bloodborne exposure" is when a care provider has contact with any patient's blood or other potentially infectious materials (internal body fluids excluding urine, feces, saliva, sweat, and tears, unless visibly contaminated with blood) such as contaminated needlesticks, cuts, splashes into eyes, nose, mouth, and skin surfaces, especially when the exposed skin is chapped, abraded, or afflicted with dermatitis.

9. What should I do if I have a "bloodborne exposure"?

Notify the Designated Infection Control Officer immediately by calling the Loudoun County Department of Fire-Rescue Service's Emergency Communications Center at 703-777-0637. For additional information, refer to the Section VI of the Loudoun County Fire-Rescue Exposure Control Plan.

If you have any questions on the procedures, contact the Department's Designated Infection Control Officer.

10. After I have been vaccinated, what will happen if I have a confirmed hepatitis B exposure?

If you have been vaccinated and have a confirmed hepatitis B exposure, based on the degree of exposure (i.e., needlestick), you may be sent to the Emergency Department or a designated County Physician where blood may be drawn to ascertain your hepatitis B antibody level. If you have sufficient hepatitis B antibodies, then no further action would be necessary. If you did not develop sufficient antibodies, then a Recombinant booster vaccination and hepatitis B immune globulin (HBIG) would be indicated.

Let us stress the fact that pre-vaccination is much more effective in protecting you against hepatitis B than post-vaccination.

11. **Can I donate blood after I receive the Recombinant hepatitis B vaccine?**

According to the American Red Cross, individuals who are receiving or have received the Recombinant hepatitis B vaccine can donate blood. However, you should advise blood bank personnel that you have received the vaccine through a vaccination program and not as a result of an exposure.

12. If I have had hepatitis B in the past, do I need this vaccine?

Not usually. CDC advises that most individuals develop an immunity, however, you should consult with your private physician.

KEY FACTS: Recombinant [hepatitis B vaccine (Recombinant) MSD]**PRODUCT DESCRIPTION**

Recombinant is a non-infectious subunit viral vaccine derived from hepatitis B surface antigen produced in yeast cells.

A portion of the hepatitis B virus gene, coding for the surface antigen, is cloned into yeasts, and the vaccine for hepatitis B is produced from cultures of this recombinant yeast strain according to methods developed in the Merck Sharp & Dohme Research Laboratories.

DOSAGE			
The volume of vaccine to be given on each occasion is as follows:			
<u>Group</u>	<u>Initial</u>	<u>1 Month</u>	<u>6 Months</u>
Younger Children (to 10 yrs.) (Pediatric Formulation 5 mcg/0.5 mL)	0.5 mL	0.5 mL	0.5 mL
Adults (Adult Formulation 1 mcg/1.0 mL)	1.0 mL	1.0 mL	1.0 mL

ADMINISTRATION

Recombinant is for intramuscular injection. The deltoid muscle is the preferred site for intramuscular injection in adults.

The anterolateral thigh is the recommended site for intramuscular injection in infants and young children.

The immunization regimen consists of three doses of vaccine given according to the following schedule:

First Dose: at elected date; Second Dose: one month later; Third Dose: six months after first dose.

HOW SUPPLIED

No. 4773 - Recombinant Adult Formulation is supplied as a multi-dose vial of vaccine, 10 mcg/1.0 mL in a 3 mL vial. NDC 0006-4773-00

No. 4769 - Recombinant Pediatric Formulation, is supplied as a single dose vial of vaccine, 5 mcg/0.5 mL. NDC 0006-4769-00

COMPARISON

The profiles of the recombinant and plasma-derived vaccines are comparable in terms of safety and effectiveness, based on the clinical trials to date.

<u>Description</u>	<u>Recombinant</u> Yeast-derived 10 mcg./dose	<u>Heptavax-B</u> Plasma-derived 20 mcg./dose
<u>Immunogenicity</u>	>90% seroconversion	>90% seroconversion
<u>Duration of Protection</u>	Unknown	Available data - approx. 5 yrs. in most vaccinees.
<u>Tolerability</u>	Generally well tolerated Clinical trials- >3,000 vaccinees	Generally well tolerated Clinical trials- >19,000 vaccinees; >1 million-U.S. 3 million-worldwide.

INSTRUCTIONS

HEPATITIS B VACCINATION CONSENT/DECLINATION FORM

Consent Form:

IF you choose to receive the hepatitis B vaccination, INOVA will have you complete a consent form prior to you beginning the hepatitis B vaccination series. If you are under 18 years of age, a parent or legal guardian is required to accompany you to INOVA.

Declination Form:

If you choose not to receive the hepatitis B vaccination at this time, please return the attached Loudoun County Department of Fire-Rescue Declination Form to the Loudoun County Department of Fire & Rescue Service's Primary Designated Infection Control Officer.

If you are under 18 years of age, a parent or legal guardian is required to provide their signature on the Declination Form. This form will be filed in your personnel/member file at the Department of Fire & Rescue Services.

**HEPATITIS B VACCINATION DECLINATION FORM
LOUDOUN COUNTY DEPARTMENT OF FIRE-RESCUE**

MEMBER NAME: _____

POSITION TITLE/DEPARTMENT: _____

DATE: _____

**- IF DECLINING VACCINE -
PLEASE RETURN THIS FORM TO THE DESIGNATED INFECTION CONTROL
OFFICER AT THE DEPARTMENT OF FIRE-RESCUE SERVICES**

I understand that due to my occupational exposure to blood or other potentially infectious materials I may be at risk of acquiring hepatitis B Virus (HBV) infection. I have been given the opportunity to be vaccinated with hepatitis B vaccine, at no charge to myself. I have received training on the hepatitis B Virus and the hepatitis B vaccination. However, I decline hepatitis B vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring hepatitis B, a serious disease. If in the future I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with hepatitis B vaccine, I can receive the vaccination series at no charge to me.

Reason (optional):

Member Signature

Date

If under 18 years of age, parent or legal
guardian signature is required.

Date

Department-Agency Representative Signature

Date

Designated Infection Control Officer Signature

Date

Return form to: Loudoun County Department of Fire-Rescue Services
16600 Courage Court, Leesburg, Virginia 20175
Attn: Primary Infection Control Officer

Tuberculosis (TB) Testing - General Statement of Policy

All members holding a job classification which has been categorized in List A and B in Section II. Exposure Determination/Risk Assessment, will be offered initial and annual Tuberculosis (Mantoux) Screening Test at the County's cost. Annual TB screen testing is recommended based on the annual assessment of the number of Loudoun County TB cases where fire-rescue members transported or received exposure. In addition, these members will be offered post-exposure evaluation and follow-up at the County's cost should they experience an exposure incident while performing their job duties.

All medical evaluations and procedures including the TB (Mantoux) Screening Test process, whether prophylactic or post-exposure, will be made available to members at a reasonable time and place.

This medical care will be performed by or under the supervision of a licensed physician, physician's assistant, or nurse practitioner. Medical care and TB screening test procedures will be according to the most current recommendations of the U.S. Public Health Service.

The INOVA Occupational Health is the agencies administering the member's Tuberculosis (Mantoux) Screening Test. INOVA will have a TB screening test consent form to be completed and signed at the time of testing.

Tuberculosis Skin Testing

- The TB screening test will be made available to members after they have attended training on Tuberculosis and the TB (Mantoux) Screening Test. Those Category List A or B job classification members consenting to receive the test must receive the test within 10 days of initial assignment and prior to working in an at-risk position.
- Members will receive the TB (Mantoux) Screening Test at the time of their entry physical at INOVA Emergency Care Center-Occupational Health within 10 days of initial assignment or prior to working in an at-risk position. No appointment is necessary to receive their annual TB (Mantoux) Screening Test.
- The TB (Mantoux) Screening will not be made available to any member who has already tested positive, to any members for whom the test is medically contraindicated. A declination form should be signed and the reason for non-participation noted.
- The TB test needs to be read either at INOVA or by personnel trained at the Department of Fire & Rescue Services to read the test.
- Members who chooses not to take the Tuberculosis (Mantoux) Screening Test will be required to sign a declination form, with the reason for non-participation noted, and return it to the Department's Primary Designated Infection Control Officer for filing at the Department of Fire & Rescue Services. Members, who initially refuse testing, may later receive testing upon request.

INSTRUCTIONS

TUBERCULOSIS (MANTOUX) SCREENING TEST CONSENT/DECLINATION FORM

Consent Form:

IF you choose to receive the Tuberculosis (Mantoux) Screening Test, INOVA will have you complete a consent form prior to the test being administered. If you are under 18 years of age, a parent or legal guardian is required to accompany you to INOVA.

Declination Form:

If you choose not to receive the Tuberculosis (Mantoux) Screening Test at this time, please return the attached Loudoun County Department of Fire-Rescue Declination Form to the Loudoun County Department of Fire & Rescue Service's Primary Designated Infection Control Officer.

If you are under 18 years of age, a parent or legal guardian is required to provide their signature on the Declination Form. This form will be filed in your personnel/member file at the Department of Fire & Rescue Services.

**INFORMED DECLINATION
TUBERCULOSIS (MANTOUX) SCREENING TEST
LOUDOUN COUNTY DEPARTMENT OF FIRE-RESCUE**

I have attended an educational session on Tuberculosis. This session included information regarding the Mantoux skin test, which is used to determine whether the Tuberculosis organism is present in the body.

I understand that I may be occupationally exposed to Tuberculosis and that I may be at risk of acquiring Tuberculosis. I understand that the Centers for Disease Control and Prevention (CDC) and the Occupational Safety and Health Administration (OSHA) recommend that I should be tested to determine whether I have contracted Tuberculosis.

I have been given the opportunity to be tested using the Mantoux skin test, at no charge to myself. However, I decline Tuberculosis screening at this time. I understand that, by declining this screening, I am at risk of having Tuberculosis without my knowledge. I understand that I will be able to obtain testing for Tuberculosis in the future if I choose to change my mind.

PLEASE PRINT

NAME: _____ DEPARTMENT: _____ # _____

REASON FOR DECLINATION: _____

SIGNATURE: _____ DATE: _____

Return form to:

Loudoun County Department of Fire-Rescue Services
16600 Courage Court,
Leesburg, Virginia 20175
Attn: Primary Designated Infection Control Officer

SECTION VI. EXPOSURE INCIDENTS - PROCEDURES FOR NOTIFICATION, EVALUATION AND POST EXPOSURE MEDICAL MANAGEMENT

A bloodborne exposure incident is contact with any patient's or individual's blood or other potentially infectious materials to the employee's eye, mouth, other mucous membrane, non-intact skin, or through parenteral injury.

Refer to Hand Washing & Other General Hygiene Measures in Section #III of this plan for immediate cleaning of exposure site.

Notification of Bloodborne Exposure Incident and Initial Medical Management

Fire-Rescue members who have experienced an exposure **ARE TO ACCOMPANY THE PATIENT TO THE RECEIVING HEALTH CARE FACILITY** and are to **notify** that receiving health care facility's physician or registered nurse upon arrival that an exposure has occurred. The receiving health care facility will provide initial evaluation of the exposure, follow that facilities notification procedures. **The exposed employee will immediately call the Department's Communication Division to page the on-duty Designated Infection Control Officer to contact you at the source patient's receiving health care center. If the health care facilities physician determines a true exposure has occurred, the Designated Infection Control Officer will provide instructions and assistance to the exposed member. The exposed member will be provided confidential counseling, baseline testing and initial medical evaluation and care.**

Fire-Rescue members who have experienced an exposure, but ARE NOT ABLE TO ACCOMPANYING THE PATIENT TO THE RECEIVING HEALTH CARE FACILITY, DUE TO MEDIVAC TRANSPORT ARE TO IMMEDIATELY CALL THE DEPARTMENT'S COMMUNICATION DIVISION TO PAGE THE ON-DUTY DESIGNATED INFECTION CONTROL OFFICER. The Designated Infection Control Officer will contact you at your current location and provide notification of the exposure to the source patient's receiving health care facility. The Designated Infection Control Officer will advise you to go to Loudoun Hospital Center for baseline testing and initial and medical evaluation and care.

If warranted by the receiving health care facility's physician, the source patient's receiving health care facility will conduct a Oraquick rapid test for HIV on the source patient's blood. The Oraquick test results are received by the health care facility within 1 hour. The source patient's blood will be sent to an accredited laboratory contracted by the receiving health care facility to test for Hepatitis B and Hepatitis C.

The exposed member is to complete a written description of the circumstances of their exposure and submit it to the Designated Infection Control Officer. This written description will be attached to the Exposure Incident Investigation form.

Notification to the Designated Infection Control Officer also serves as notification for worker's compensation purposes. The First Report of Injury/Illness Report form will have to be completed and submitted to Frankie Rust at Fire-Rescue Services. The Loudoun County Risk & Insurance Division completes an OSHA 300 Form for all exposures, injuries and illnesses that occur during performance of

job duties. The primary Designated Infection Control Officer at the Loudoun County Department of Fire-Rescue Services maintains a Contaminated Sharp Injury/Exposure Log.

Post Exposure Medical Management

The Loudoun County Public Health Department will provide the post exposure medical management for the exposed employee. The Designated Infection Control Officer will provide the Loudoun County Public Health Department and the exposed member with the following elements:

- documentation of the route(s) of exposure, and the circumstances under which the exposure incident occurred;
- identification and documentation of the source individual unless identification is infeasible or prohibited by law.

Source Individual Status

If the infectious status of the source individual is unknown:

- if the source individual's blood is available, and the individual's consent is not required by law, the blood shall be tested and the results documented. (Virginia Code 32.1-45.1)
- the source individual's blood is available, and the individual's consent is required by law, the blood shall be tested as soon as feasible after consent is obtained. (Virginia Code 32.1-37.2 & 32.1-45.2)

When the source individual's test results are received by the Designated Infection Control Officer, he/she will notify the exposed employee and the Loudoun County Public Health Department of those results.

If the source individual is not tested, the exposed employee's only option is to be tested for Hepatitis B, Hepatitis C and HIV serological status.

Exposed Members

The exposed member's blood shall be collected as soon as feasible after consent is obtained, and tested for HBV, HCV and HIV serological status.

If the member consents to baseline blood collection, but does not give consent at that time for HIV serologic testing, the sample shall be preserved for at least 90 days. If, within 90 days of the exposure incident, the member elects to have the baseline sample-tested, such testing shall be done as soon as feasible.

The exposed member will be offered post-exposure prophylaxis, when medically indicated, as recommended by the U.S. Public Health Service. The exposed member will be offered counseling and medical evaluation of any reported illnesses.

The Designated Infection Control Officer will provide the following information to the healthcare professional conducting the member's post-exposure evaluation:

- a copy of 1910.1030 bloodborne pathogens standard;
- a description of the exposed member's duties as they relate to the exposure incident;
- the documentation of the route(s) of exposure and circumstances under which exposure occurred;
- results of the source individual's blood testing, when available;
- all medical records relevant to the appropriate treatment of the member including vaccination status.

The evaluating healthcare professional will provide the member's Designated Infection Control Officer and the exposed member with the evaluating healthcare professional's written opinion within 15 days of the completion of the evaluation. The written opinion will be limited to the following information:

- the member has been informed of the results of the evaluation;
- the member has been told about any medical conditions resulting from exposure to blood or other potentially infectious material which require further evaluation or treatment.
- NOTE: All Other Findings Shall Remain Confidential And Shall Not Be Included In The Written Report.
- The member will receive a full written report of his/her medical evaluation and test results directly from the evaluating healthcare professional.

The Department's Designated Infection Control Officer will utilize the Exposure Incident Investigation Form for recordkeeping/documentation purposes.

Reportable Contagious Conditions

Definition of "Reportable Contagious Conditions": Conditions which are transmissible by contact (other than bloodborne or OPIM) with the sick which are required or permitted by law or regulation to be reported to Public Health officials. The pre-hospital care providers may not know of these contagious conditions at the time of treatment and transport.

The patient's receiving health care facility will notify the Fire-Rescue on-duty Designated Infection Control Officer if the patient's diagnosis is a reportable contagious condition. Notification must be made no later than 48 hours after the diagnosis is made. The Designated Infection Control Officer will contact the concerned Supervisor(s)/Officers to obtain the care providers name and phone numbers for notification of exposure information and any follow up procedures required.

**ALL FIRE-RESCUE MEMBERS ARE RESPONSIBLE TO ADHERE
TO THE LAWS RELATING TO PATIENT CONFIDENTIALITY.**

Exposure Incident Investigation Form

The Department's on-duty Designated Infection Control Officer will utilize the Exposure Incident Investigation Form on the following page for recordkeeping/documentation purposes. The exposed member is required to write a description in detail of the exposure incident. This written description will be attached to the Exposure Incident Investigation form.

Loudoun County Department of Fire & Rescue Services
CONFIDENTIAL
EXPOSURE INCIDENT INVESTIGATION FORM

Name of Exposed Member:		Social Security #:	
Date:	Time:	Volunteer or Career:	Agency:
Incident #:	Day Phone #:	Even. Phone #:	Pager #:
Type Infectious Material Involved:		Type/Source of Exposure/Brand-Description of Device:	
PPE Utilized by Exposed Member: Training of Exposed Member:		Circumstances of Exposure (to include engineering controls and work practices in use at time of exposure):	
Decontamination/Clean-Up Procedures Taken:		Exposure Notification Dates/Times: ▪ Rec. Health Care Facility: ▪ Designated Inf. Ctl. Ofc.:	
Source Individual's Name:		Source Deceased:	Source Being Tested:
Receiving Health Care Facility:		HCF Phone #:	
Exposed Member Baseline Blood Test: ▪ Date Test Conducted: ▪ Agency Conducting Test: ▪ Member advised to sign agency's Medical Release to send results to Loudoun County Public Health Dept.:		Exposed Member Vaccinated for HBV: ▪ # of Series Completed: ▪ Year Vaccination Completed: ▪ Agency administering vaccination: If agency not L.C. Public Health Dept., member advised documentation of HBV vaccination needed at time of Health Dept. appt.:	
County's First Report/Initial Claim Form: ▪ Date Submitted: ▪ Received By: ▪ Sent to Co.'s R&I By:		Recommendations for avoiding exposure:	

The following steps must be taken and information transmitted for bloodborne exposures:	
	Completion Date:
Exposed member referred to Loudoun County Public Health Department for follow-up care (includes baseline blood testing of employee if not already conducted):	
Loudoun County Public Health Department sent a copy of this Exposure Incident Investigation form:	
Exposed member provided with documentation regarding exposure incident by D.O.:	
Source individual blood test results received: <ul style="list-style-type: none"> ▪ HBV: ▪ HCV: ▪ HIV: 	
Exposed member notified of source individual's test results:	
Loudoun County Public Health Department notified of source individual's blood test results:	

Attachment: Exposed member's written description of circumstances of exposure incident.

ALL RECORD KEEPING MUST BE FILED IN A CONFIDENTIAL FILE AND MAINTAINED FOR THE MEMBER'S DURATION OF EMPLOYMENT/SERVICE, PLUS 30 YEARS.

Good Samaritan Exposures

Citizen bystanders who render aid to an individual in an emergency situation or assist fire-rescue members in patient care and as a consequence of rendering such aid receive an exposure are entitled to have the source individual/patient tested for HIV and Hepatitis B and C, and to receive the results of those blood tests.

If fire-rescue members on the scene believe the citizen has experienced a true exposure (non-intact skin, mucous membrane contamination, or parenteral exposure), they are to assist the exposed citizen by:

Helping them to immediately clean the exposed site with waterless antiseptic hand rinse or soap and water if available (good friction for 15 seconds).

Providing them with the Good Samaritan Handout on the following page, which advises them on how to obtain the assistance they need to have the source patient tested and where to receive post exposure medical management. Fire-Rescue members will need to provide the following information on the handout given to the exposed individual:

Unit number the patient was transported in, incident number, patient number, and the name of the medical facility where the source patient was transported.

A Fire-Rescue member will immediately notify the Designated Exposure Control Officer through the Communications Division of the exposure to a citizen and be prepared to provide the following information to the Designated Exposure Control Officer:

Unit number the patient was transported in, incident number, patient number, and the name of the medical facility where the source patient was transported.

Citizens name and phone numbers.

Good Samaritan Handout

If you have received a person's blood or body fluids into your eye, mouth, nose, or other mucous membrane, on non-intact skin (an open area of your skin), or an object containing blood or body fluids pierced your skin, then you have received an exposure.

The Virginia law on deemed consent states that if you have received an exposure (as defined above) to a person's blood or other potentially infectious materials while rendering emergency assistance, you are entitled to have that person tested for HIV, Hepatitis B, and Hepatitis C and to receive the results of those tests.

Call 703-777-0637 immediately, advise that you have received an exposure and are requesting the Designated Infection Control Officer to assist you. Please provide your name and the phone number where you can be reached at that time.

The Designated Infection Control Officer will need the following information (obtain from the fire-rescue member on the emergency scene):

Unit # the patient was transported by: _____

Incident # _____

Patient # _____

Name of the medical facility receiving the source patient

SECTION VII. MEMBER TRAINING

Members with potential occupational exposure will be trained regarding bloodborne and airborne pathogens at the time of initial assignment and prior to tasks where exposure may occur and annually thereafter, during work hours.

The training approach will be tailored to the educational level, literacy, and language of the members.

Training must be interactive to include an opportunity for the member to have their questions answered by the trainer. If questions cannot be answered by the trainer or the Designated Infection Control Officer, then the Health Physician of the Loudoun County Public Health Department or the Infection Control Practitioner of Loudoun Hospital Center will be contacted to obtain the answer.

The Training Division is responsible for arranging and/or conducting training. (A variety of methods may be used; e.g. lecture, demonstration, and written materials.)

Initial Training will include the following:

- 1. Inform members as to the location of the OSHA Standard 1910.1030 and the Guidelines for Preventing the Transmission of Mycobacterium Tuberculosis.**
- 2. Explanation of this exposure control plan;**
- 3. Explanation of the epidemiology, modes of transmission, signs & symptoms and risk in the workplace of communicable (bloodborne & airborne) diseases to include Human Immunodeficiency Virus (HIV), Hepatitis B Virus (HBV), Hepatitis C Virus (HCV), Syphilis, Smallpox, Varicella (Chickenpox), Mycobacterium Tuberculosis, SARS and Meningitis;**
- 4. How to recognize work tasks and other activities which may place the member at risk of exposure to blood, other potentially infectious materials and airborne diseases;**
- 5. Review and demonstration of personal protective equipment/needle safe devices/TB face mask/fit testing (to include where & how to obtain);**
- 6. Review and demonstration of workplace engineering controls and work practices that will be used to prevent/reduce the risk of exposure to blood, other potentially infectious materials and airborne diseases;**
- 7. Review limitations of personal protective equipment, and latex allergies/sensitivities;**
- 8. Review workplace Hepatitis B vaccine & TB skin testing program, including the benefits and safety of the vaccination/test, and that the vaccination/test is offered at no cost to the member at a reasonable time;**
- 9. Review workplace management of medical waste to include explanation of warning labels, color coding and labeling requirements;**

10. Review work restriction guidelines;

11. Review workplace post exposure management procedures, to include exposure notification, evaluation and follow-up medical care;

12. Record keeping procedures

13. How to access their medical records;

14. Review compliance monitoring

Annual refresher training is required and will provide a brief review of the basic information and any new/updated information.

Additional training will be provided whenever there are changes in tasks or procedures, which affect members' occupational exposure. This training will be limited to the new exposure situation.

All training will be documented on the Department's "Training Record: Bloodborne and Airborne Pathogens" form. This form is included in Section VIII. Record Keeping Procedures.

SECTION VIII. RECORD KEEPING PROCEDURES

Procedures are in place for maintaining both medical and training records. If the Department of Fire-Rescue Services and the County of Loudoun should cease business, and there is no successor employer to receive and retain the records for the prescribed period, then the Director of the National Institute for Occupational Safety and Health (NIOSH) will be notified at least three months prior to the disposal of records. The records will be transmitted to NIOSH, if required by the Director, within the three month period.

Medical Record Keeping

The on-duty Designated Infection Control Officer will complete an Exposure Incident Investigation Form for each exposure. The exposed member will provide a written description of circumstances of exposure, which will be attached to the Exposure Incident Investigation form. A copy of the completed form will be provided to the exposed member and the healthcare professional conducting the post exposure medical evaluation and care. The Exposure Incident Investigation form will be maintained as part of the member's medical record below.

A medical record will be established and maintained by the healthcare professional for each member with exposure. The record shall be maintained for the duration of employment/services plus 30 years in accordance with 29 CFR 1910.20. The healthcare professional conducting post exposure medical evaluation and care is the Loudoun County Public Health Department. Dr. Goodfriend, Director of the Loudoun County Department of Public Health, is responsible for maintaining medical records.

The member's medical record shall include the following:

- Exposure Incident Investigation Form;
- Name and social security number;
- Health history
- TB skin testing results
- Hepatitis B vaccination status with dates of hepatitis B vaccinations and any medical records relative to the member's ability to receive vaccination;
- Examination results, medical testing, and any follow-up procedures;
- Copy of the healthcare professional's written opinion;
- Copy of the information provided to the healthcare professional who evaluates the member for suitability to receive Hepatitis B vaccination prophylactically and/or after an exposure incident.

Loudoun County Department of Fire & Rescue Services
CONFIDENTIAL
EXPOSURE INCIDENT INVESTIGATION FORM

Name of Exposed Member:		Social Security #:	
Date:	Time:	Volunteer or Career:	Agency:
Incident #:	Day Phone #:	Even. Phone #:	Pager #:
Type Infectious Material Involved:		Type/Source of Exposure:	
PPE Utilized by Exposed Member: Training of Exposed Member:		Circumstances of Exposure (to include engineering controls and work practices in use at time of exposure):	
Decontamination/Clean-Up Procedures Taken:		Exposure Notification Dates/Times: ■ Rec. Health Care Facility: ■ Designated Inf. Ctl. Ofc.:	
Source Individual's Name:		Source Deceased:	Source Being Tested:
Receiving Health Care Facility:		HCF Phone #:	
Exposed Member Baseline Blood Test: ■ Date Test Conducted: ■ Agency Conducting Test: ■ Member advised to sign agency's Medical Release to send results to Loudoun County Public Health Dept.:		Exposed Member Vaccinated for HBV: ■ # of Series Completed: ■ Year Vaccination Completed: ■ Agency administering vaccination: If agency not L.C. Public Health Dept., member advised documentation of HBV vaccination needed at time of Health Dept. appt.:	
County's First Report/Initial Claim Form: ■ Date Submitted: ■ Received By: ■ Sent to Co.'s R&I By:		Recommendations for avoiding exposure:	

The following steps must be taken and information transmitted for bloodborne exposures:

Completion Date:

Exposed member referred to Loudoun County Public Health Department for follow-up care (includes baseline blood testing of member if not already conducted):

Loudoun County Public Health Department sent a copy of this Exposure Incident Investigation form:

Exposed member provided with documentation regarding exposure incident by D.O.:

Source individual blood test results received:

- HBV:
- HCV:
- HIV:

Exposed member notified of source individual's test results:

Loudoun County Public Health Department notified of source individual's blood test results:

Attachment: Exposed member's written description of circumstances of exposure incident.

ALL RECORD KEEPING MUST BE FILED IN A CONFIDENTIAL FILE AND MAINTAINED FOR THE MEMBER'S DURATION OF EMPLOYMENT/SERVICES, PLUS 30 YEARS.

POST EXPOSURE CLINICIAN'S WRITTEN OPINION

Date of possible exposure: _____

Under the Bloodborne Pathogen Standard 1910.1030 Loudoun County is entitled to a medical provider's written opinion following a possible exposure incident. This information satisfies that requirement.

_____ presented to the Loudoun County Health Department to follow-up on a possible bloodborne pathogen exposure incident that occurred while he/she was at work or as an EMS volunteer. If the incident being reported is considered to be an "exposure incident", the employee/volunteer has been counseled as to the appropriate medical treatment recommended by the Centers for Disease Control and Prevention (CDC).

() The employee/volunteer has been informed of the results of my examination.

Signature of Clinician

Date: _____

Clinician (Print Name)

Fire-Rescue Personnel/Volunteers: Copy to be mailed to
Designated Infection Control Officer at Fire-Rescue
16600 Courage Court, Leesburg, VA. 20175

Other Employees/Volunteers: Copy to be mailed to their direct supervisor

Original to file

Confidentiality of Medical Records

The record will be kept confidential. The contents will not be disclosed or reported to any person within or outside the workplace without the member's express written consent, except as required by law or regulation. Member medical records required under 1910.1030 shall be provided upon request for examination and copying to the subject member, to anyone having the written consent of the member, and to the Commissioner of the Virginia Department of Labor and Industry in accordance with 29 CFR 1910.20.

**ALL FIRE-RESCUE MEMBERS ARE RESPONSIBLE TO ADHERE
TO THE LAWS RELATING TO PATIENT CONFIDENTIALITY.**

Training Records

Training records shall be maintained by the Department's Training Division for 3 years from the date on which the training occurred.

The following information shall be included:

- dates of training sessions;
- indicate if basic or annual refresher
- contents or a summary of the training sessions;
- names and qualifications of trainer(s); and
- names and job titles of all persons attending.

Training records shall be provided upon request for examination and copying to the member, to the member's representatives, and to the Commissioner of the Virginia Department of Labor and Industry in accordance with 29 CFR 1910.20.

**TRAINING RECORD: BLOODBORNE & AIRBORNE PATHOGENS
LOUDOUN COUNTY DEPARTMENT OF FIRE-RESCUE SERVICES**

Purpose: To provide training in the Bloodborne & Airborne Pathogens Exposure Control Plan.

Training Summary & Handouts: Attached to this record.

Date of Training: _____

Type of Training: _____ Basic _____ Annual Refresher

Duration of Training: _____ hours.

Instructor(s) Name: _____

Qualifications of Instructor(s): Certified: T-T-T/OSHA Bloodborne & Airborne Pathogens; Certified by: _____

Note: Maintain this training record for 3 years.

NAME OF ATTENDEE: ATTENDEE JOB TITLE: AGENCY OF ATTENDEE:

NAME OF ATTENDEE: **ATTENDEE JOB TITLE:** **AGENCY OF ATTENDEE:**

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

This Exposure Control Plan was prepared by:

Frankie H. Rust, Primary Designated Infection Control Officer
Loudoun County Fire & Rescue Services

Annual Review & Revision of this Exposure Control Plan is conducted by the Fire & Rescue Exposure Control Committee.

Date Prepared: August 1992
Last Review Date: August 2004
Last Revision Date: August 2004